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IDENTIFIERS	*Zunis

ABSTRACT

The Zuni comprehensive development plan encompasses a variety of projects designed to achieve major development goals on the Zuni Indian reservation in New Mexico. The single overall planning objective is to raise the level of living for residents of the Zuni reservation to equal or to exceed the average for all United States citizens. Major program goals are (1) to increase individual income through creation of permanent employment opportunities on or near the reservation, (2) to enhance educational opportunity suited to local community needs, and (3) to improve living conditions through well-planned community programs and services. The document contains a program matrix portraying the main sections of the plan and highlighting cost, funding, and benefits over the 5-year (1971-75) planning period; summary tables on total funding requirements, funding sources, employment, and income; and project details, under each major goal, prefaced with summary tables on program funding, employment, and wages. (JH)

ED 060980

For a better ZUNI by '75

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ZUNI
COMPREHENSIVE DEVELOPMENT PLAN

PRESENTED BY
THE

PUEBLO of ZUNI

WITH THE COOPERATION OF
LOCAL, STATE AND FEDERAL AGENCIES

JULY, 1969

RC006011

Zuni Comprehensive Development Plan

VOLUME ONE

TABLE OF CONTENTS

TITLE PAGE

PREFACE 2

ZUNI TODAY AND OUR FUTURE – GOVERNOR LEWIS 11

COMPREHENSIVE PLAN SUMMARY 25

SUMMARY BRIEFS

INCREASE INDIVIDUAL INCOME 32

ENHANCE EDUCATIONAL OPPORTUNITY 35

IMPROVE LIVING CONDITIONS 41

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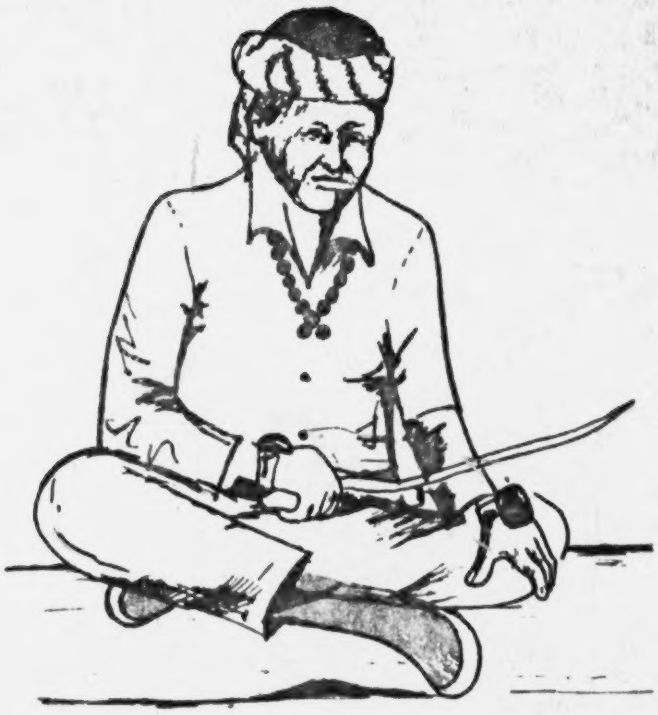
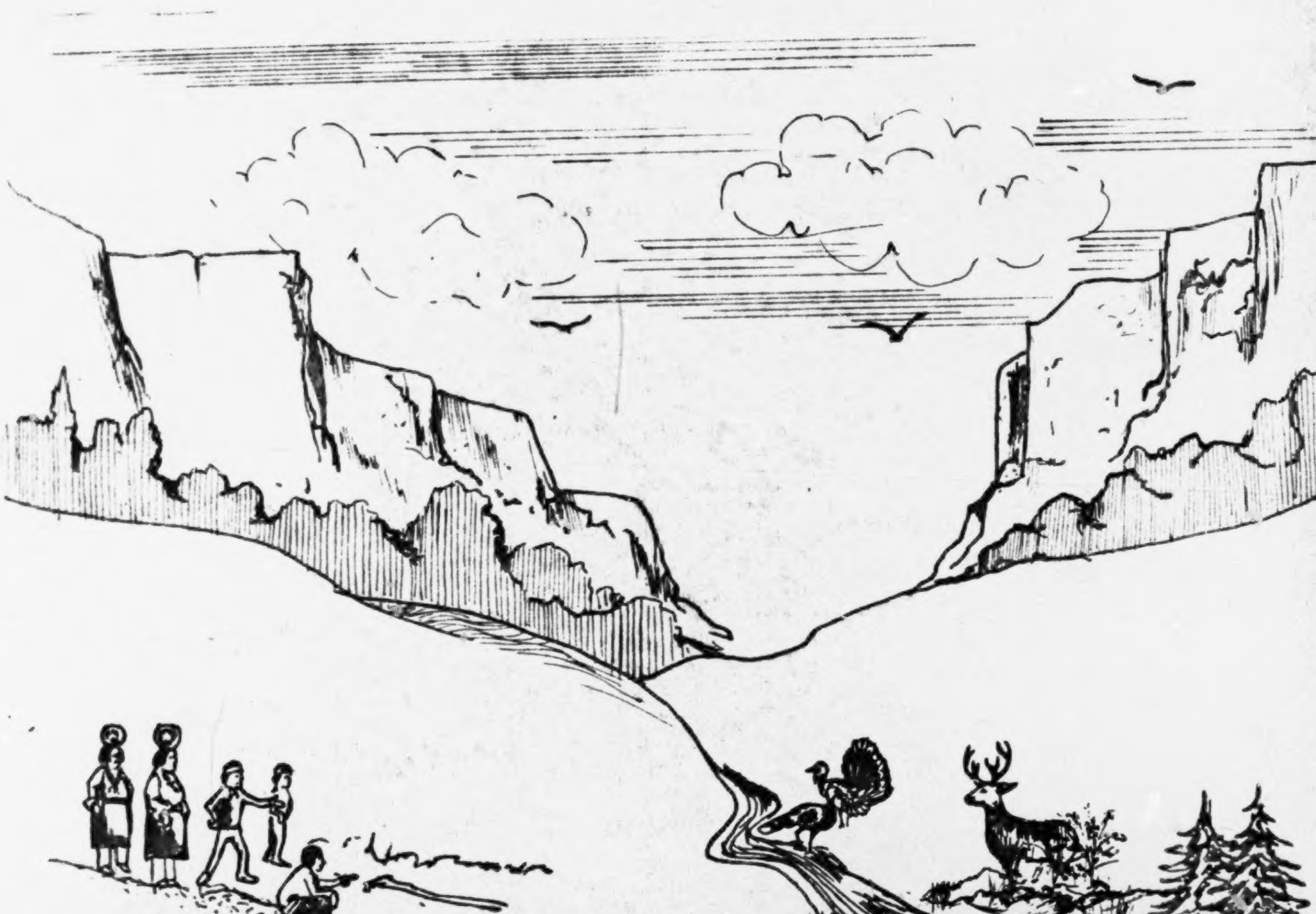
S.M.C. Cartographic Section
Concho, Oklahoma



LET ME TELL YOU
OF MY PEOPLE
AND OF OUR LAND . . .

The Beginning . . .

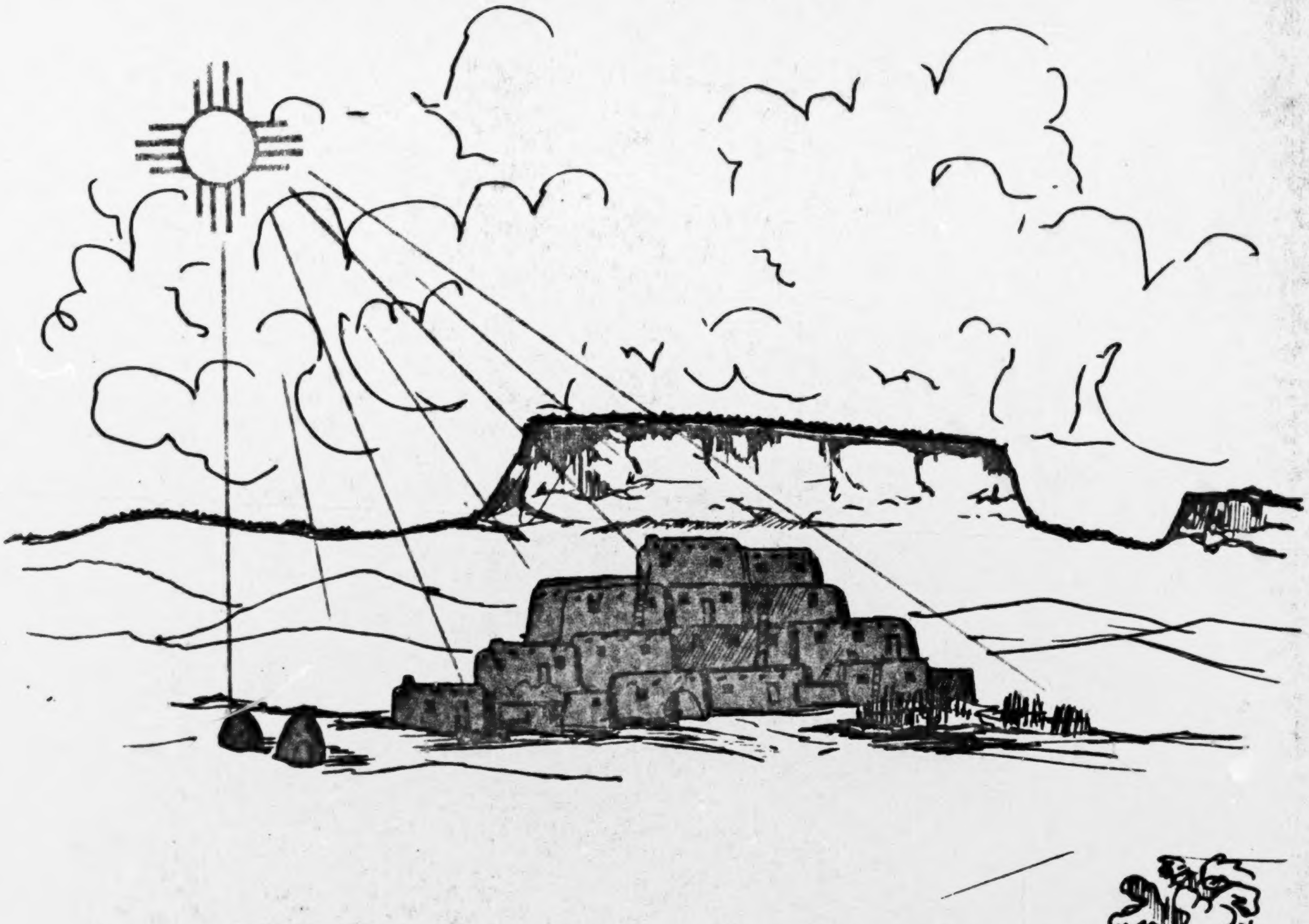
We wandered
till one day
we reached a place . . .
and all ***ZUNIS*** knew
we'd arrived on
our ***SACRED LANDS***!!



The Growth . . .

Centuries sped by . . .

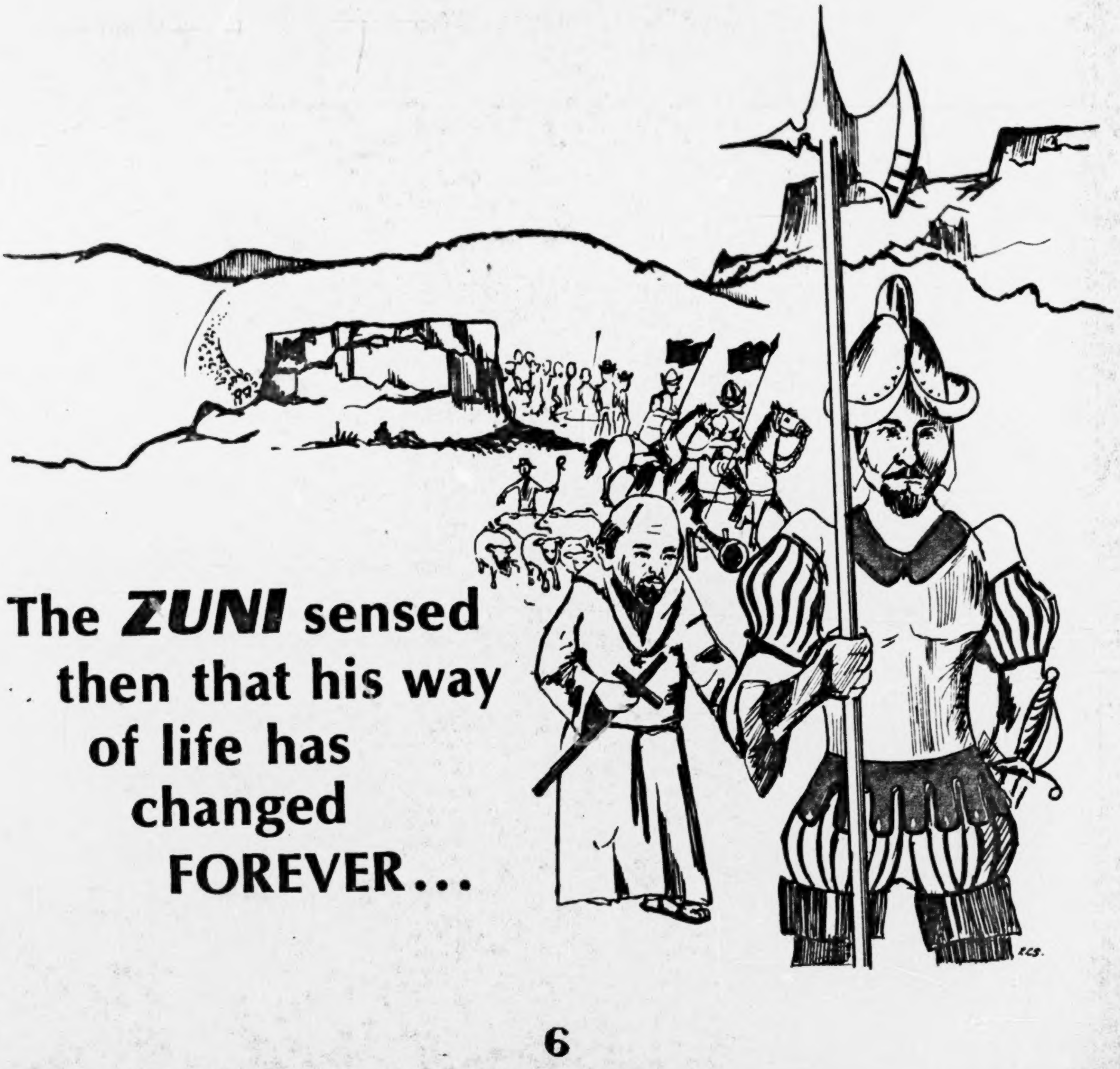
and all ***ZUNIS*** shared happiness as villages flourished on ***OUR LAND*** !!



THE CHANGE...

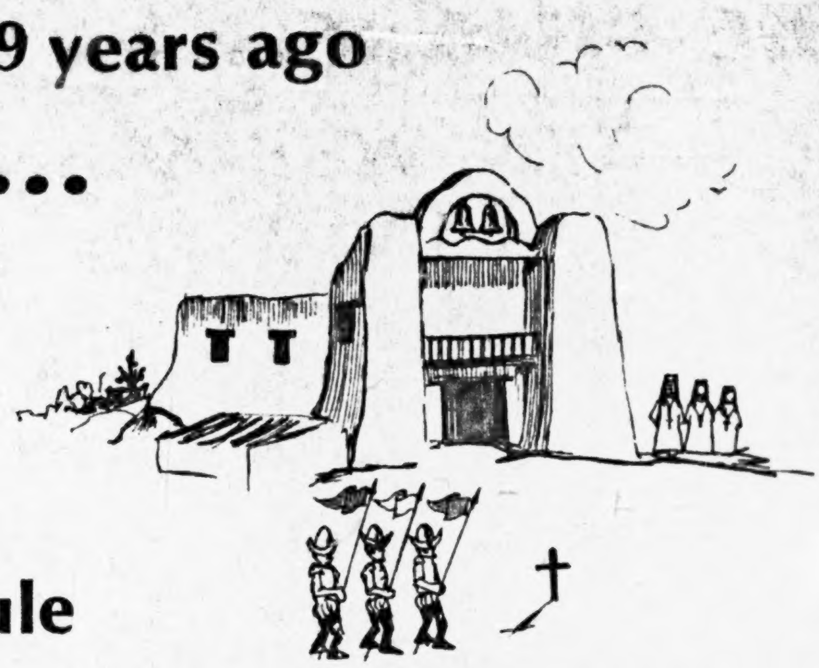
THEN, WE REACHED 1540 A.D.
AND SAW FOR THE FIRST TIME

PALE-FACES CHRISTIAN MONKS SHEEP
WHEELS HORSES FIREARMS ARMOR
METAL TOOLS... AND MUCH MORE...



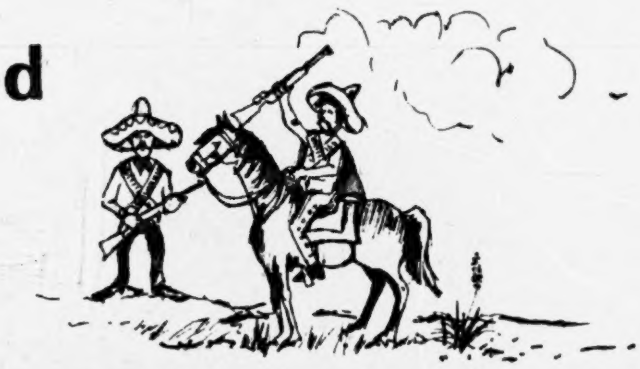
The **ZUNI** sensed
then that his way
of life has
changed
FOREVER...

Since that day 429 years ago
we ***ZUNIS...***



Endured
281 years
of Spanish rule

Fleetingly Experienced
27 years
under Mexico



And then began
over a century
of GROWTH in the ***U.S.A.!!***

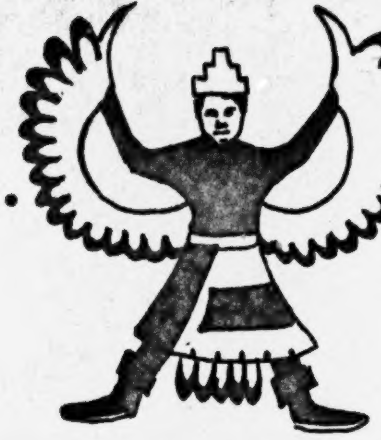
EDUCATION TRANSPORTATION COMMUNICATION MOTIVATION

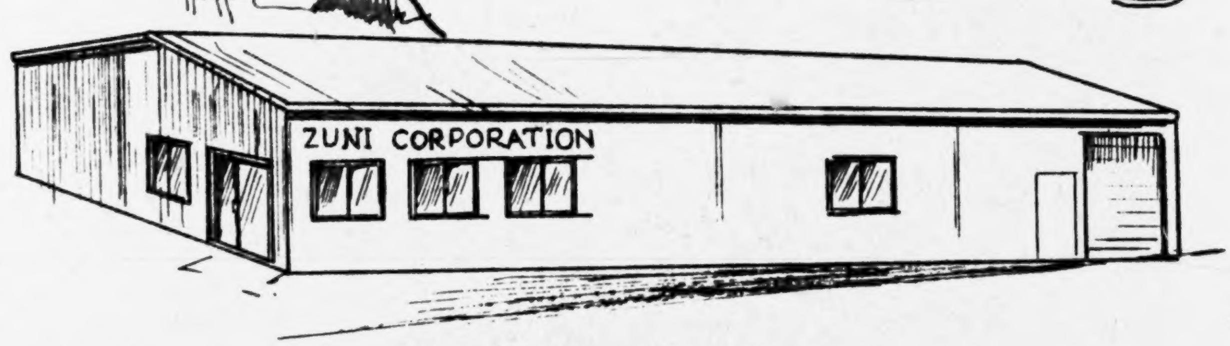
NOTICE!!
PLANT OPEN
JOBS!!

Today . . .

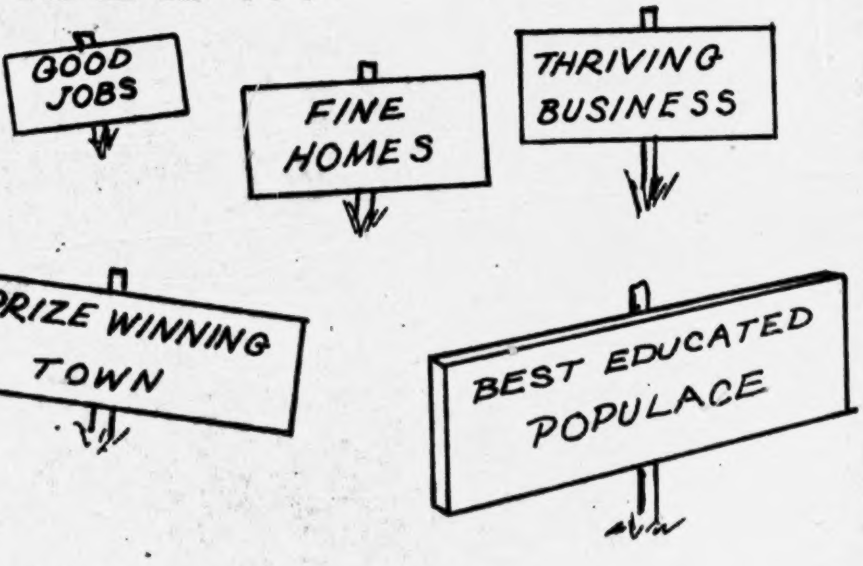
We ***ZUNIS***

RETAIN OUR CULTURE . .




ZUNI CORPORATION

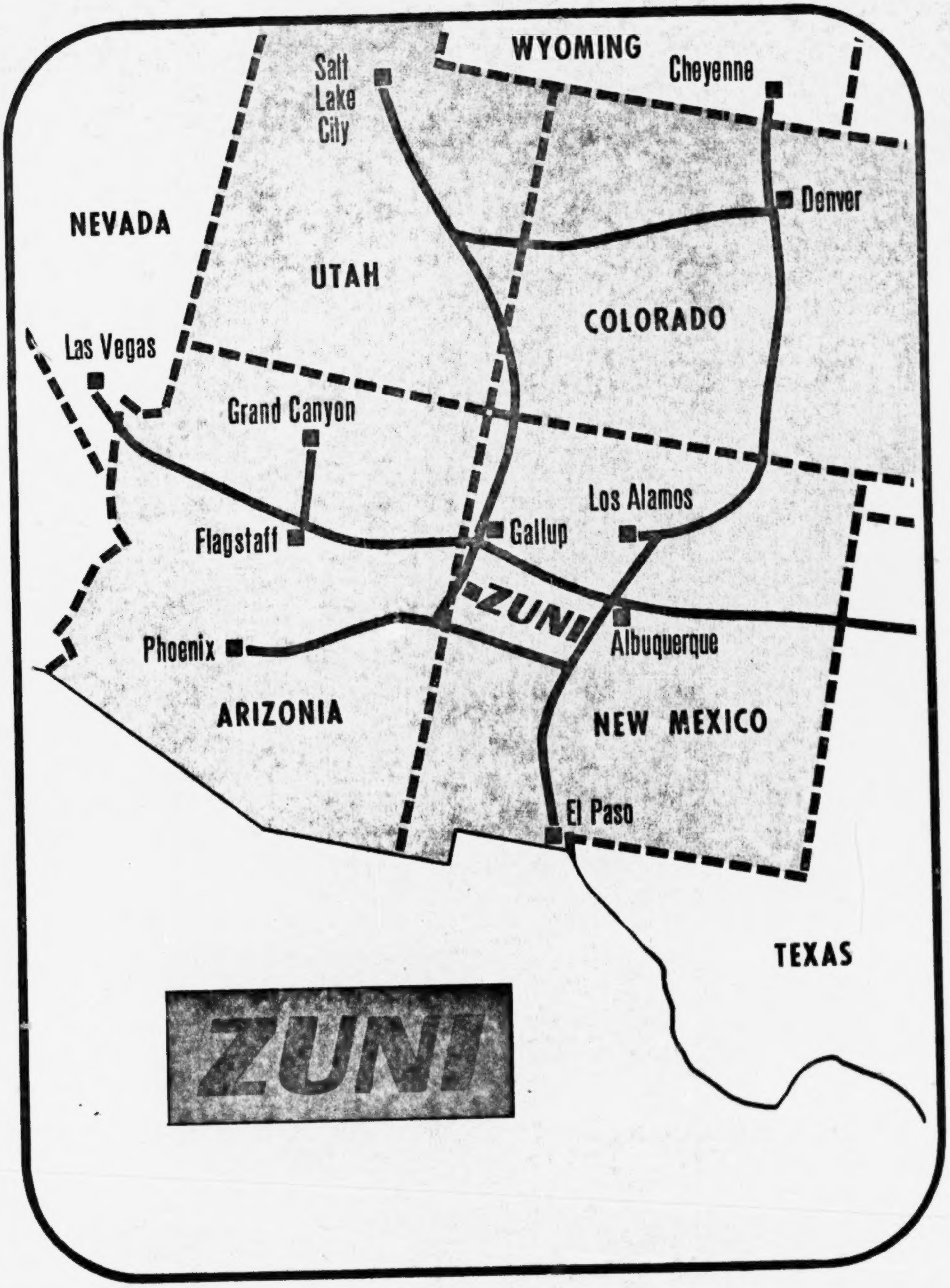
BLEND IN NEW IDEAS . . .

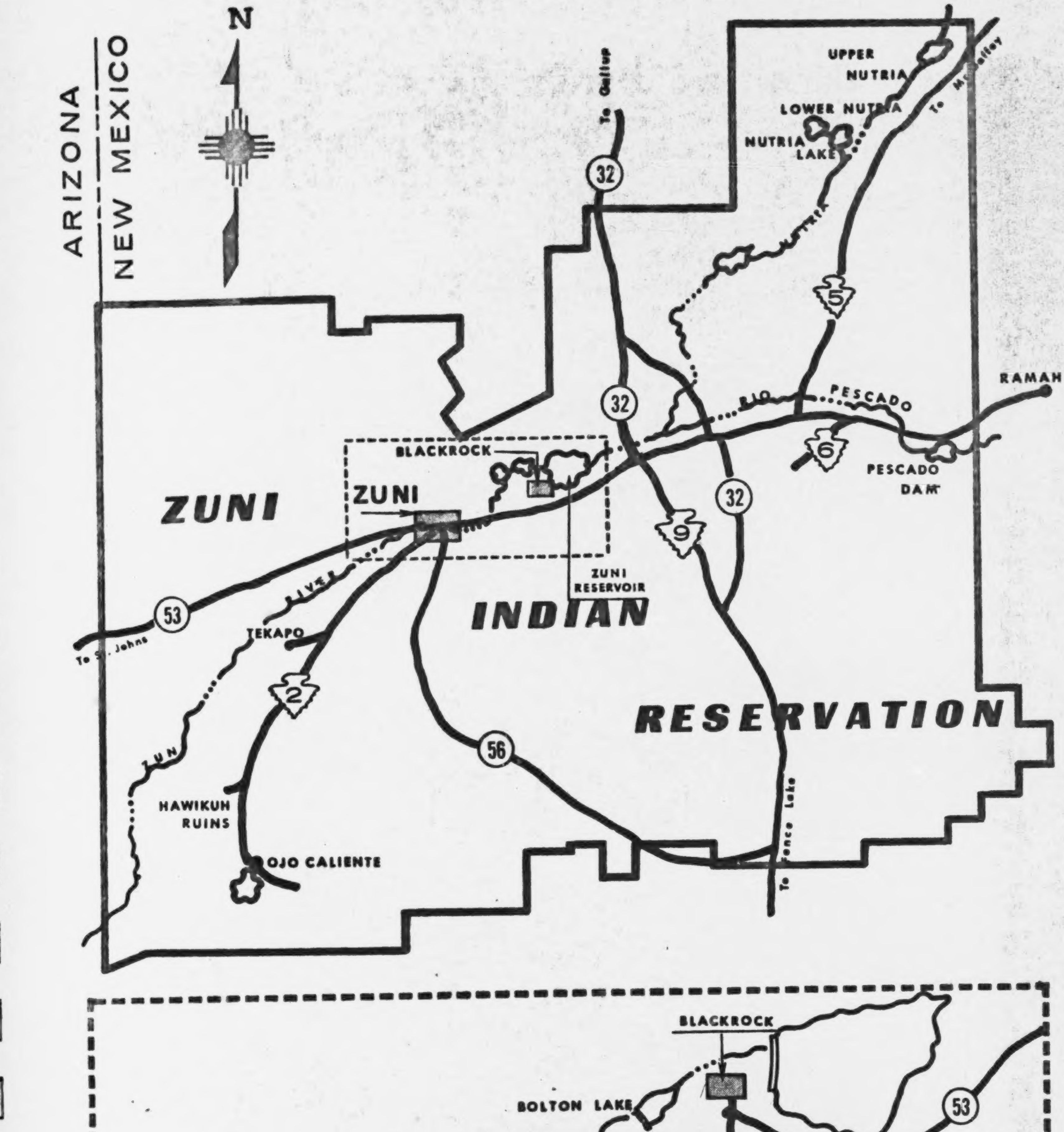

GOOD JOBS
FINE HOMES
THRIVING BUSINESS
PRIZE WINNING TOWN
BEST EDUCATED POPULACE

LOOK TO THE FUTURE . . .

and charish

our sacred *ZUNI LAND* !!


WYOMING
Salt Lake City
Cheyenne
Denver
NEVADA
UTAH
COLORADO
Las Vegas
Grand Canyon
Los Alamos
Flagstaff
Gallup
ZUNI
Albuquerque
Phoenix
ARIZONIA
NEW MEXICO
El Paso
TEXAS
ZUNI


ARIZONA
NEW MEXICO
N
To Gallup
UPPER NUTRIA
LOWER NUTRIA
NUTRIA LAKE
To McGaffey
NUTRIA
32
5
RAMAH
RIO PESCADO
6
PESCADO DAM
BLACKROCK
ZUNI
ZUNI RESERVOIR
9
INDIAN
RESERVATION
53
To St. Johns
RIVER
TEKAPO
2
ZUNI
56
HAWIKUH RUINS
OJO CALIENTE
To Fence Lake
BLACKROCK
BOLTON LAKE
EUSTACE LAKE
53
RIVER
ZUNI
ZUNI PUEBLO

Zuni Today And Our Future

By Robert E. Lewis, Governor

We are pleased with this unique opportunity to present to you our own Reservation Development Program as we see it. The invitation, after being selected as the "Pilot" reservation, to prepare a comprehensive development plan for the Zuni people, through which Federal, State, local, and private agencies can participate, was issued to us in the summer of 1968. At that time we were halfway through implementation of our own bootstrap "Zuni Plan," called "24 Projects in 24 Months." It was a relatively small program plan, but, to us, very important. The opportunity presented by this more comprehensive program is a God-send to the Zuni people and to Indians in general, as well as rural non-Indian communities.

Zuni has its share of development needs like other rural communities and Indian reservations. There are problems that have impact on our attempts to meet these needs, not only on our side but also on the part of funding agencies, because most agencies' policies were set up to apply to urban areas. So we are somewhat overwhelmed, but very excited and appreciative of this massive, coordinated approach to programing the development of the Zuni Reservation.

We still are proud people. We do not wish to hold out our hands for a Federal give-away program. We are positive that Zuni is at a stage in development where a boost in capital input will place our economy on a self-sustaining basis. As Pueblo income increases from industrial, commercial, and other developments, this income will be pledged to supplement and carry on the development program started with Federal assistance. With this mutual understanding in mind, we accept and welcome the comprehensive programing approach to solving problems and developing our physical and human resources.

We have prepared a plan to guide our Pueblo development decisions and for your consideration and use in working with us for a brighter future, where we can live in dignity and comfort on our own land.

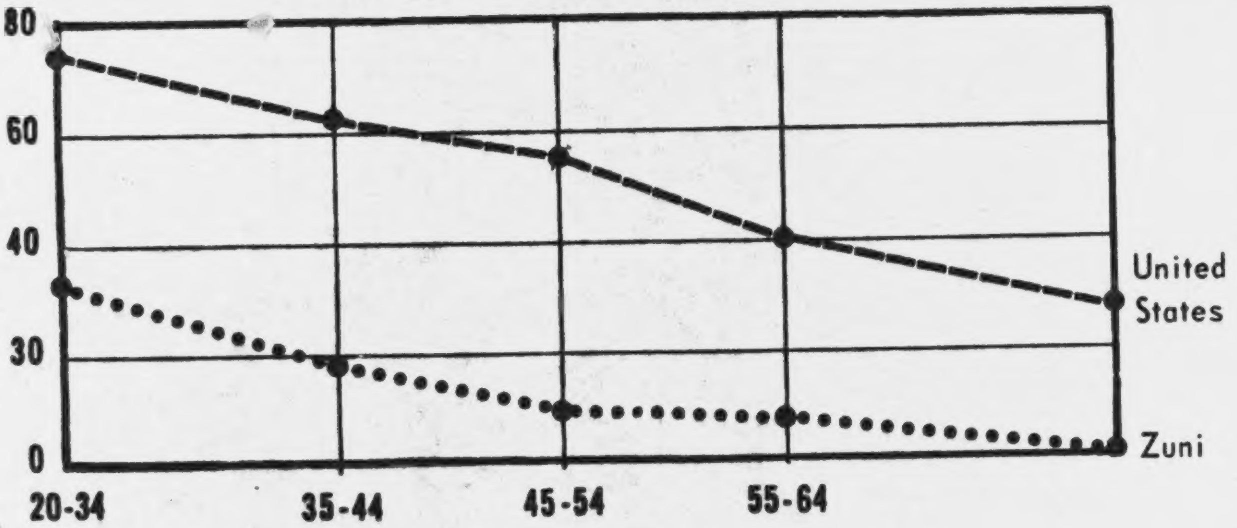
ZUNI TODAY – – OUR EFFORTS AND PROBLEMS

The story of Zuni today can best be told by recounting our efforts; identifying our major problems; recognizing their primary and secondary impact on educational, economic, and community development needs; and through indicators depicting the relative position of Zuni people in the greater American society.

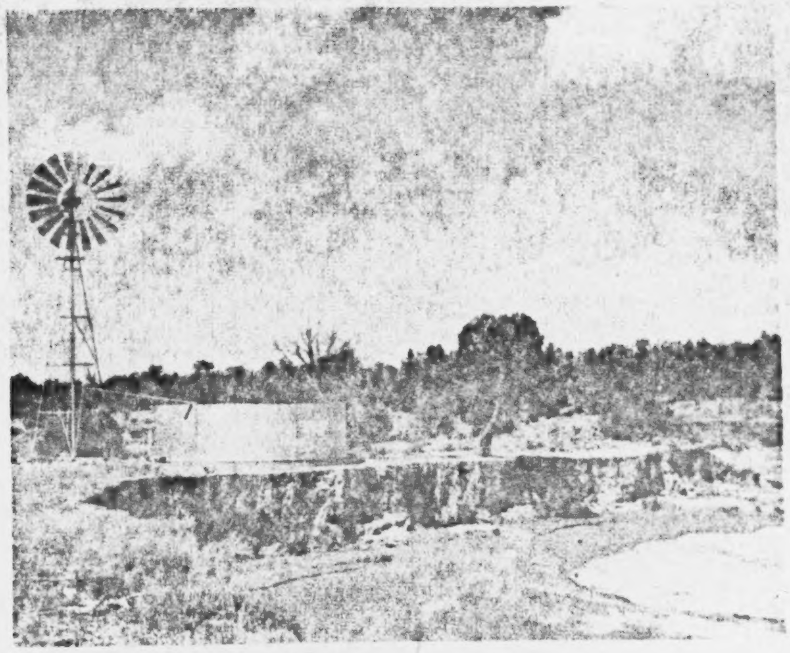
OUR EFFORTS

We encouraged our children to pursue an education in the Mission, Bureau, and now public schools – – resulting in the fact that most Zunis under 45 years of age have attended school, but the educational gap is not closing. (see graph).

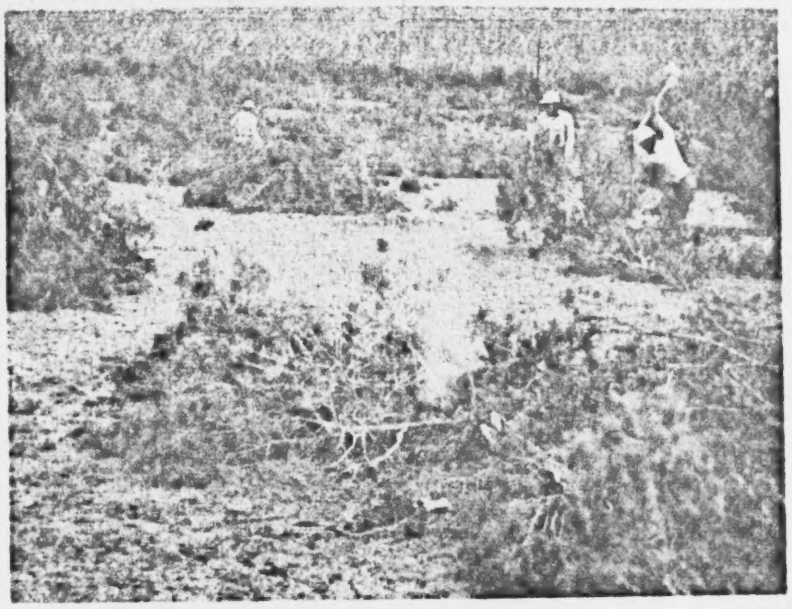
Percent Completing High School-By Age



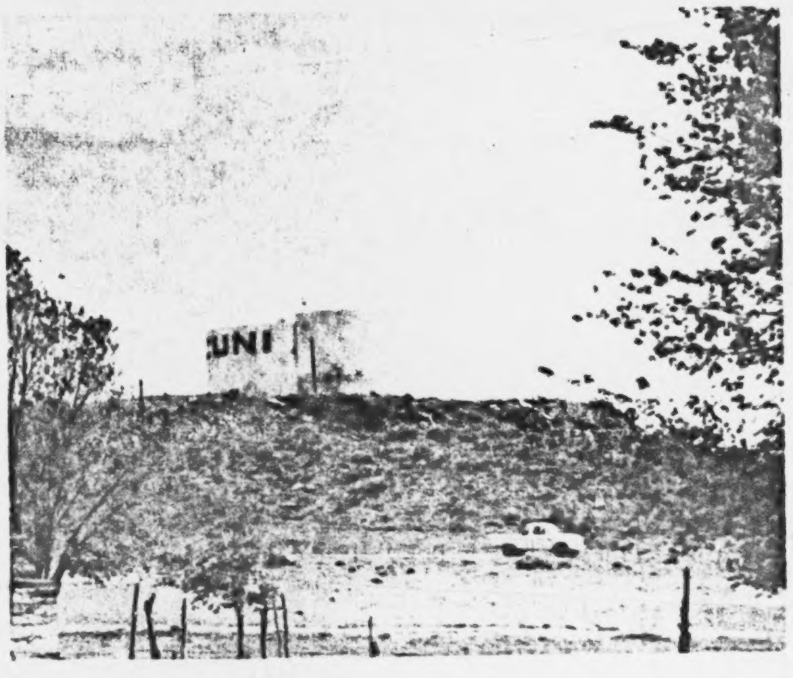
We have attempted in the past to raise our income through increased livestock production on limited range land, resulting in depletion and erosion of that resource.



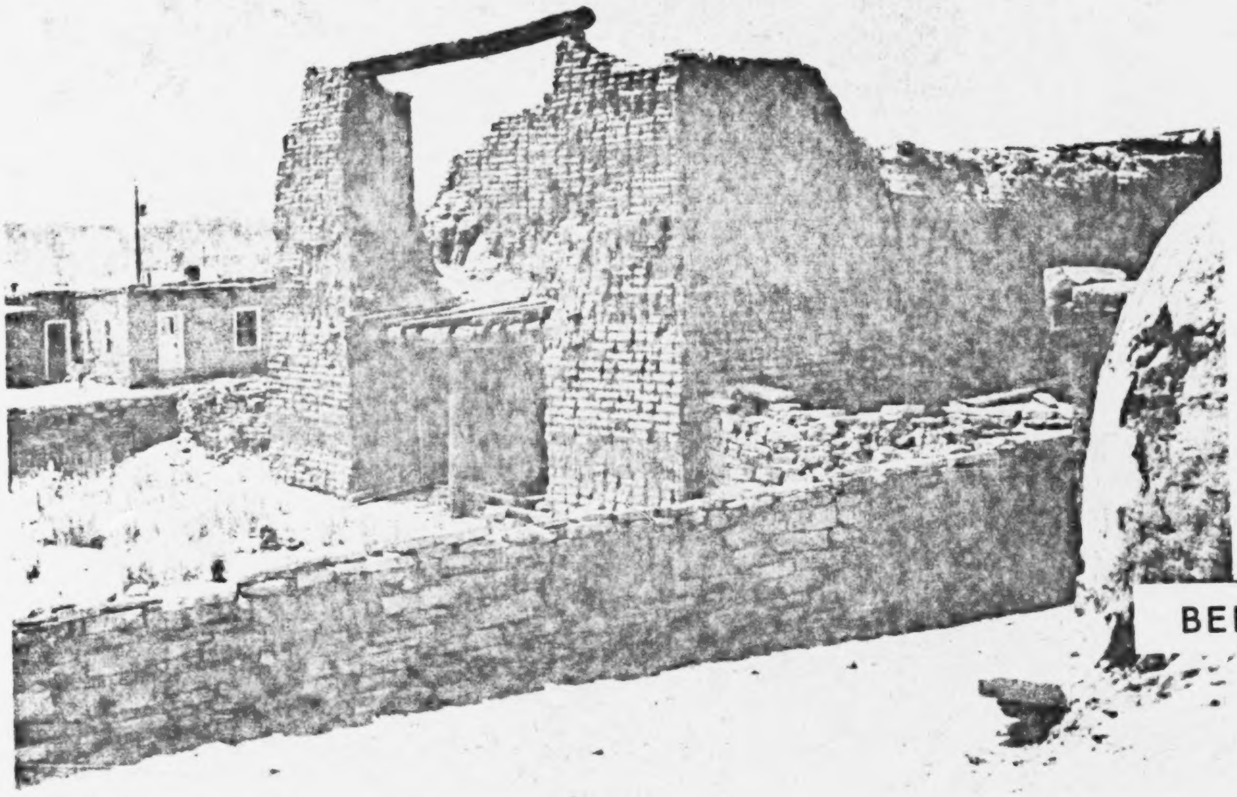
We have established livestock Associations which, with individual operators, are using the ACP Cost-Sharing Program of the Department of Agriculture. The Pueblo joined the McKinley County Soil Conservation District in 1967 and today has one Zuni on the Board of Directors.



In 1954, we borrowed $70,000 from the Farmers Home Administration to install a municipal water system. We have since repaid the loan, and expanded the system with the help of the Public Health Service.

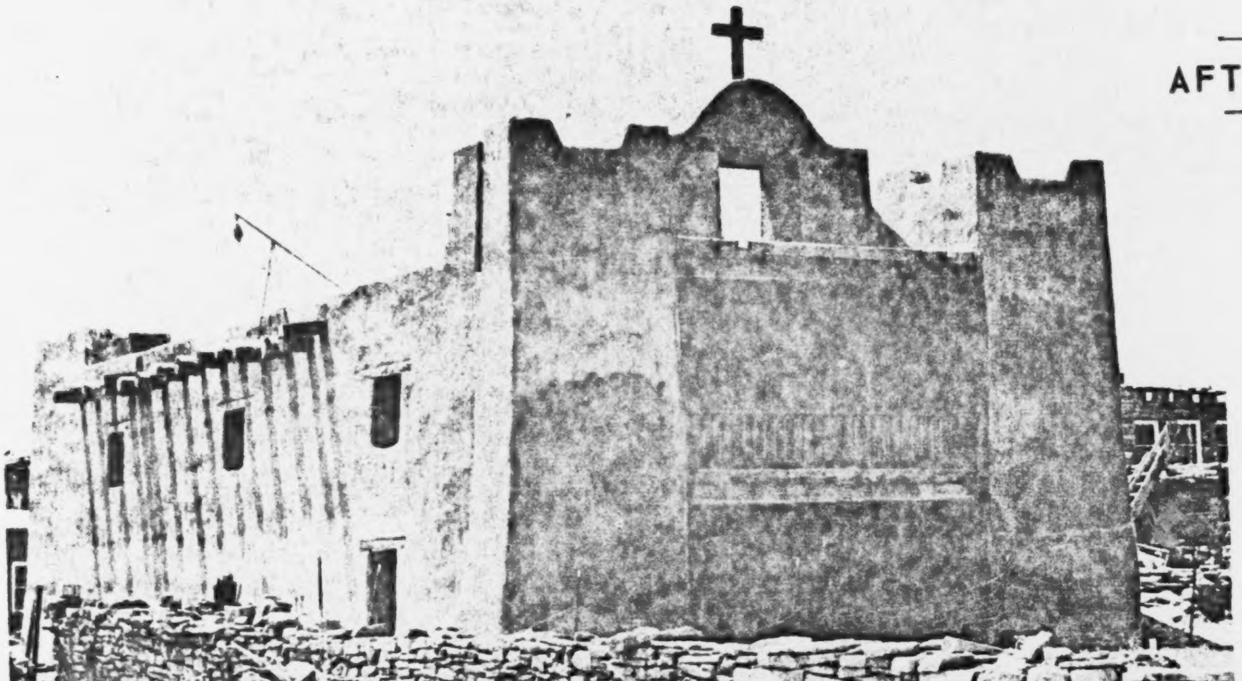


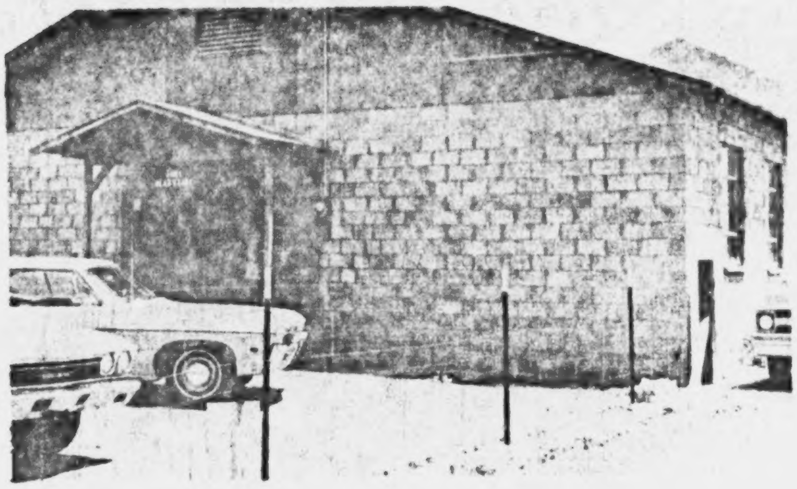
Restoration of our Old Mission Church, originally built in 1699 – – with the help of the Catholic Church and the National Park Service.



BEFORE

AFTER





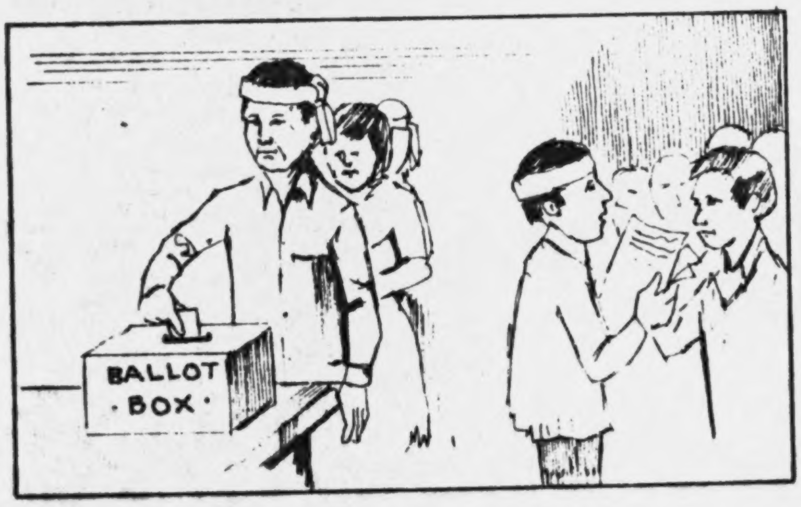
With voluntary labor and funds from community benefits we constructed our own Headstart building in 1967 to make room for our first industry (D&F) in our community hall.

ZUNI TRIBAL
FAIR GROUNDS
ARTS-CRAFTS EXHIBITS
LIVESTOCK-PRODUCE

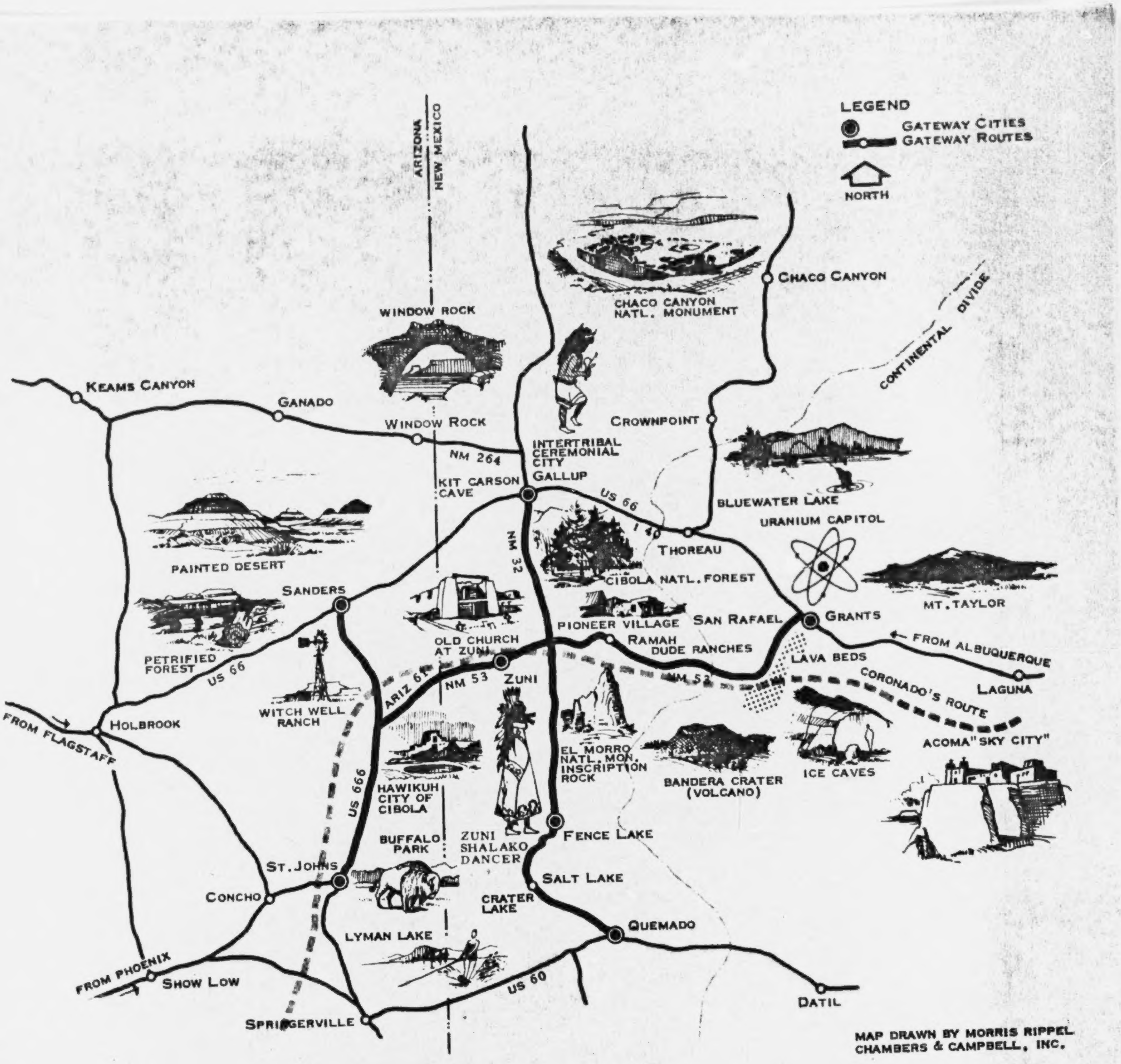
Zuni Lions' Club and voluntary labor designed and constructed a fair grounds facility in 1965 – – we now are the permanent home of the "Zuni-McKinley County Fair."

THE ZUNI CRAFTSMEN
COOPERATIVE ASSOCIATION
OPEN

Through a Community Action Program, started in 1964, we have on-going projects in Headstart, Legal Aid Services, Zuni Craftmen's Cooperative, Industrial Development, Game Warden, Etc.

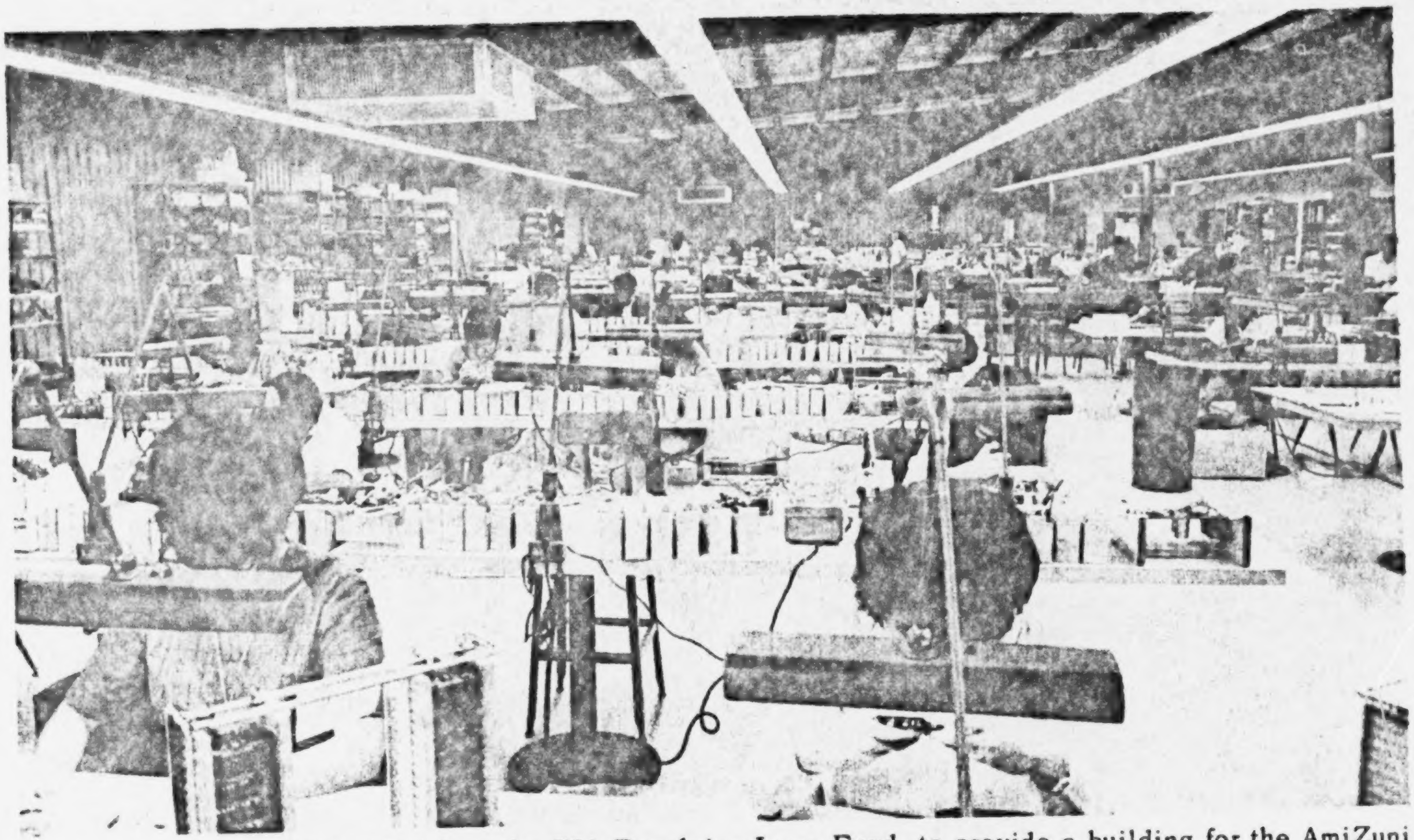


Since 1964 our Council and Governor have been elected by popular, secret ballot – – a Constitution has been drafted and is now being considered by the Pueblo members.

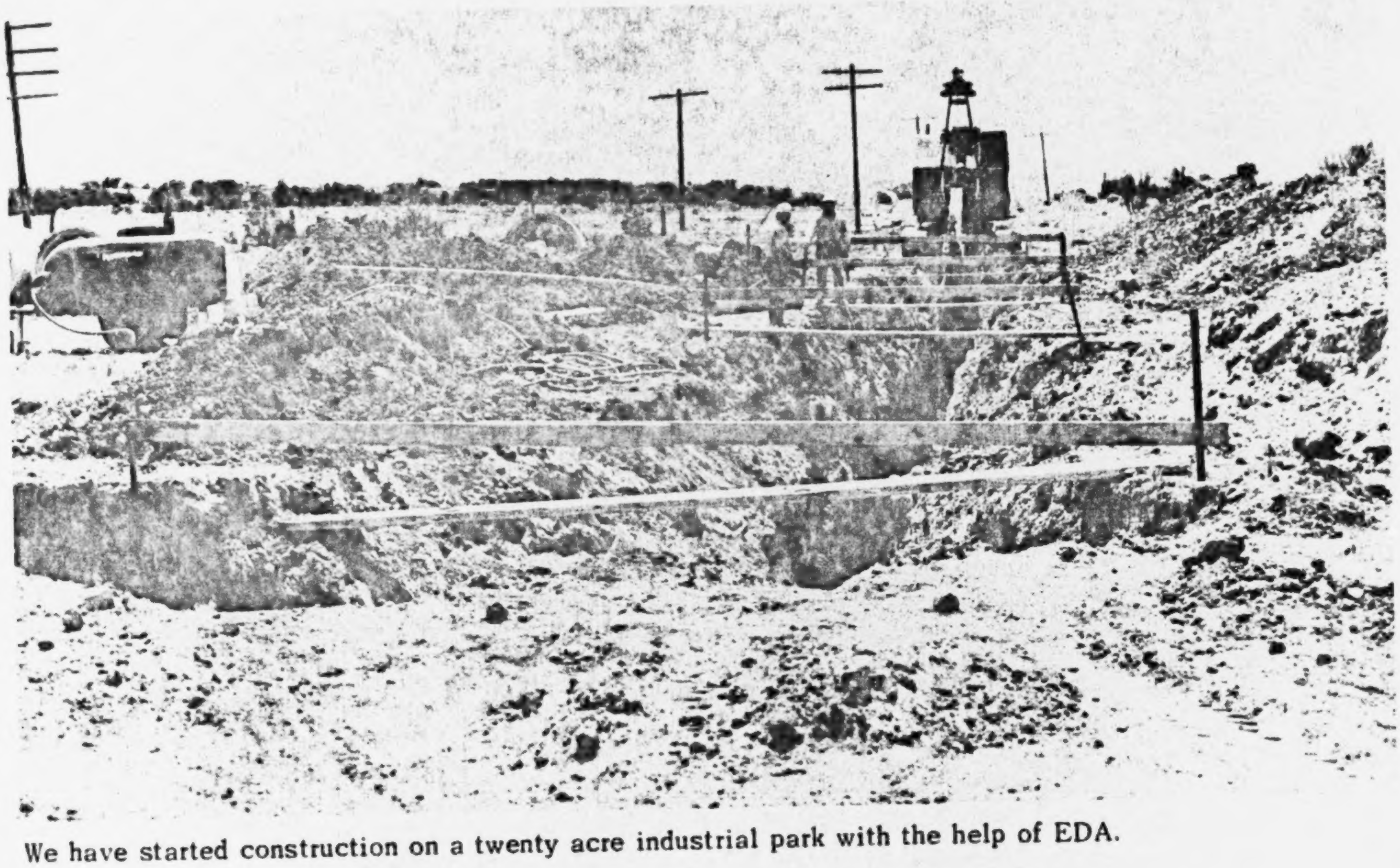

LEGEND
GATEWAY CITIES
GATEWAY ROUTES
NORTH
ARIZONA
NEW MEXICO
CHACO CANYON NATL. MONUMENT
CHACO CANYON
CONTINENTAL DIVIDE
WINDOW ROCK
KEAMS CANYON
GANADO
WINDOW ROCK
NM 264
INTERTRIBAL CEREMONIAL CITY
GALLUP
KIT CARSON CAVE
CROWNPOINT
BLUEWATER LAKE
US 66
I 40
THOREAU
URANIUM CAPITOL
PAINTED DESERT
NM 32
CIBOLA NATL. FOREST
MT. TAYLOR
SANDERS
PIONEER VILLAGE
SAN RAFAEL
GRANTS
OLD CHURCH AT ZUNI
RAMAH DUDE RANCHES
FROM ALBUQUERQUE
PETRIFIED FOREST
US 66
ARIZ 61
NM 53
ZUNI
NM 53
LAVA BEDS
LAGUNA
CORONADO'S ROUTE
FROM FLAGSTAFF
HOLBROOK
WITCH WELL RANCH
EL MORRO NATL. MON. INSCRIPTION ROCK
BANDERA CRATER (VOLCANO)
ICE CAVES
ACOMA "SKY CITY"
HAWIKUH CITY OF CIBOLA
US 666
FENCE LAKE
BUFFALO PARK
ZUNI SHALAKO DANCER
ST. JOHNS
CONCHO
SALT LAKE
CRATER LAKE
QUEMADO
LYMAN LAKE
FROM PHOENIX
SHOW LOW
US 60
DATIL
SPRINGERVILLE
MAP DRAWN BY MORRIS RIPPEL
CHAMBERS & CAMPBELL, INC.

In 1964 we invited eight neighboring communities in three counties and two states to join us in organizing the Zuni-Cibola Trails Association. Since then we have managed to get the paving of Route 53 completed and a tourism development plan prepared for the trails area.

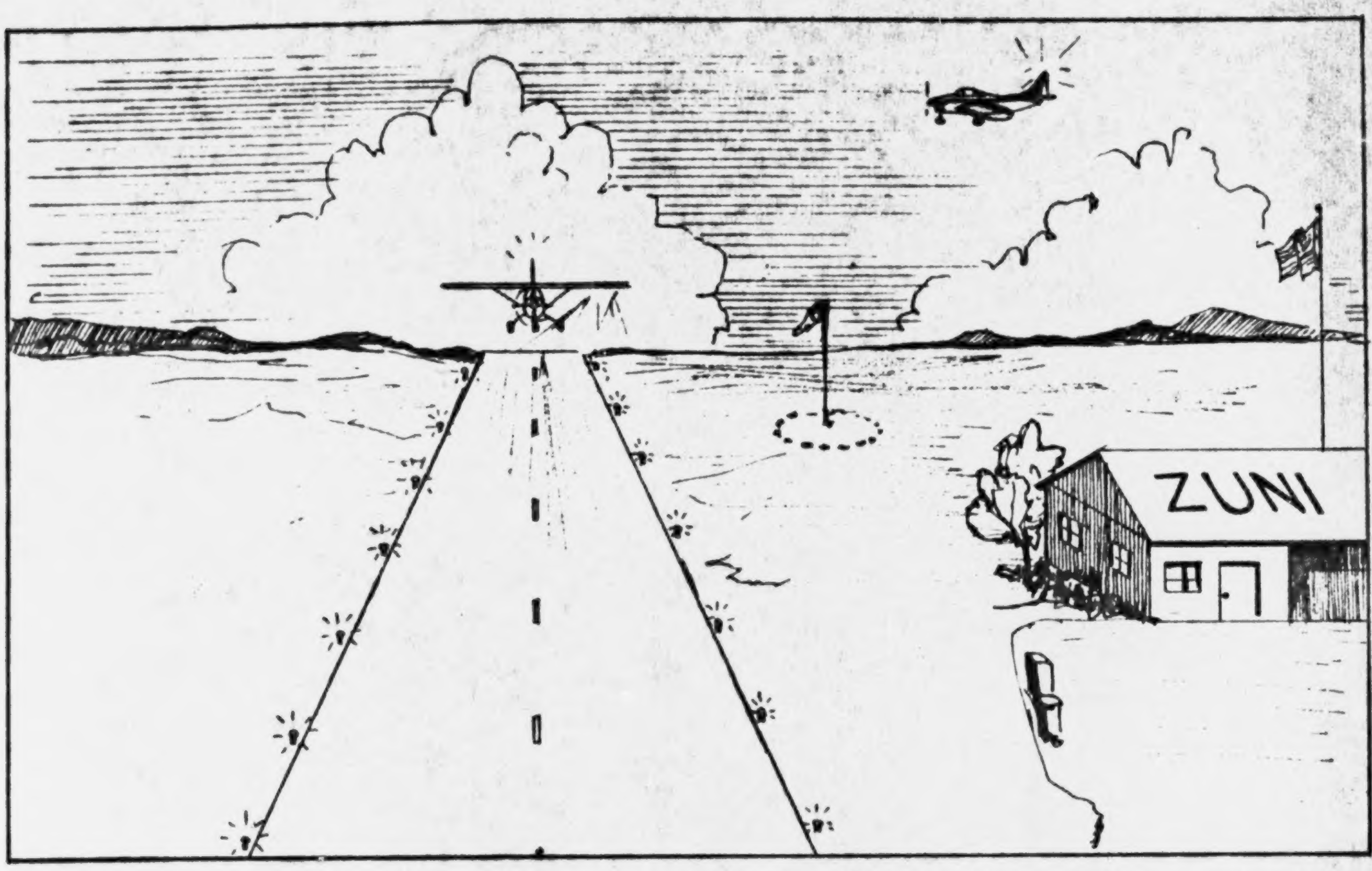
In 1967, we prepared our own "Zuni Plan," called "24 Projects in 24 Months." It was our first attempt at formally publishing our over-all objectives and charting a two-year development program. We now have passed the 75% completion point.



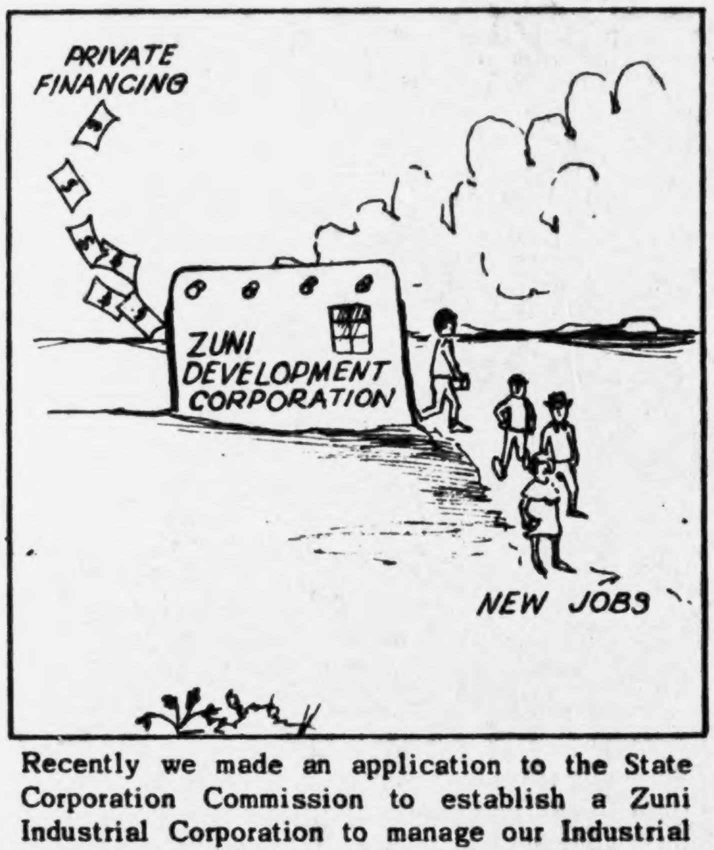
We borrowed $129,000 in 1967 from the BIA Revolving Loan Fund, to provide a building for the AmiZuni Corporation in Zuni, which now employs 160 Indians.



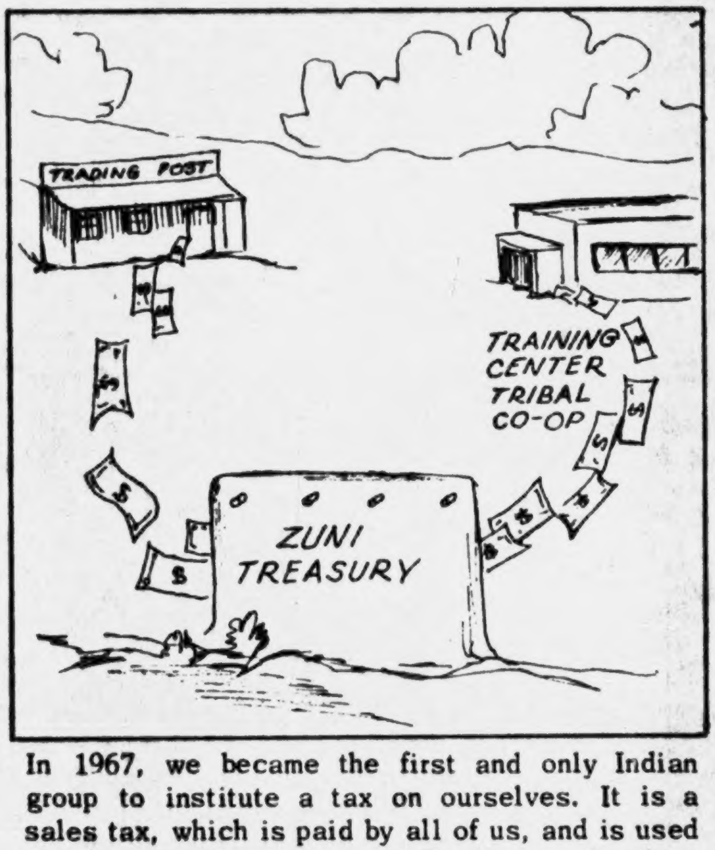
We have started construction on a twenty acre industrial park with the help of EDA.



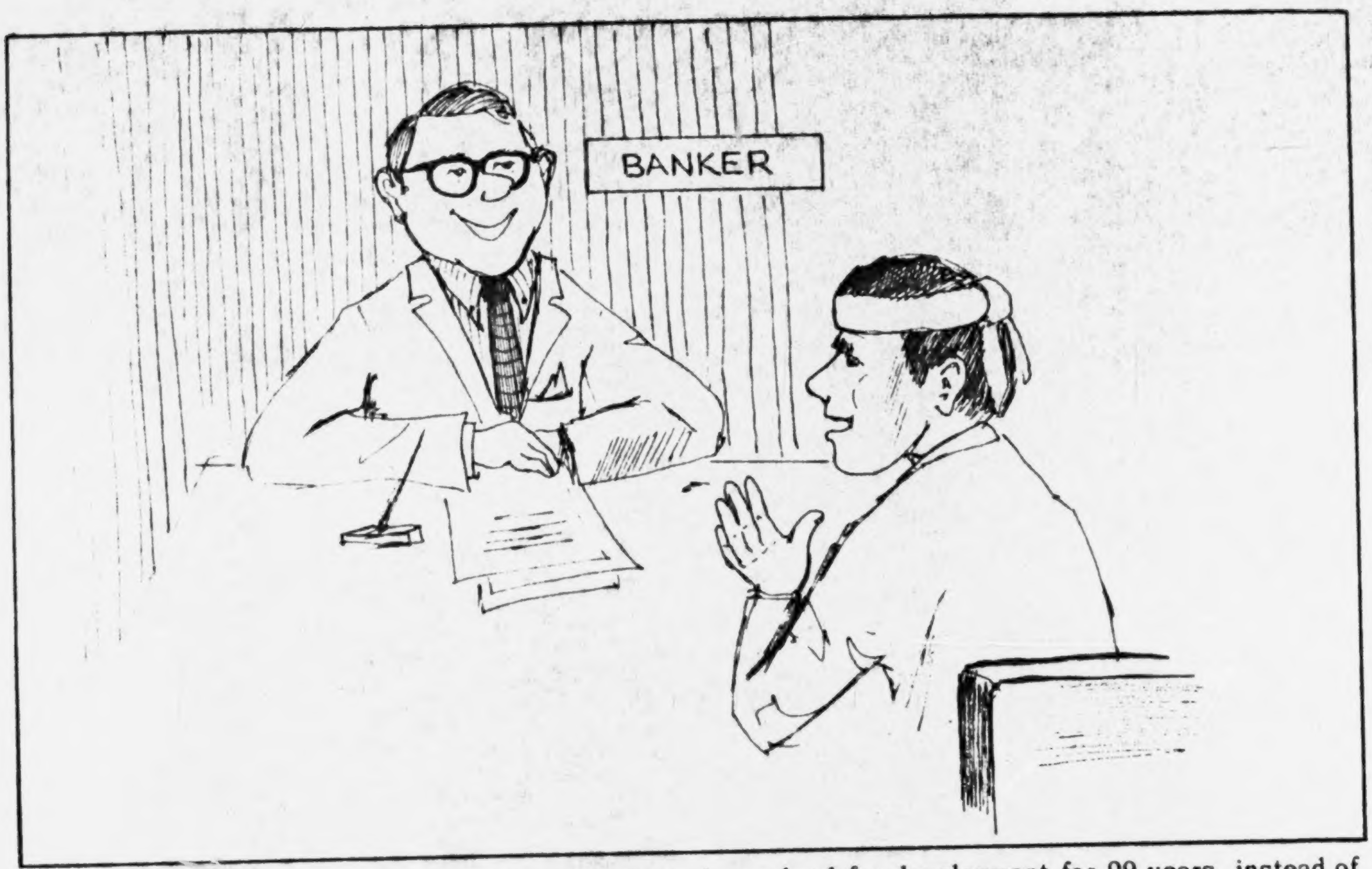
We have made application for, and have been advised of approval of a 4,800 foot lighted airstrip facility at Zuni.


PRIVATE FINANCING
ZUNI DEVELOPMENT CORPORATION
NEW JOBS

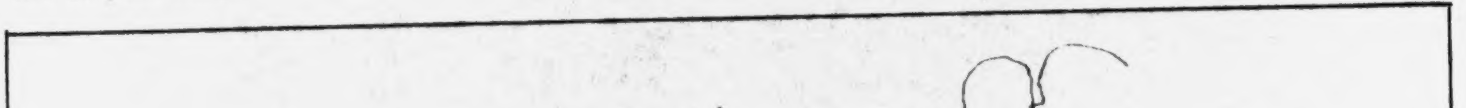
Recently we made an application to the State Corporation Commission to establish a Zuni Industrial Corporation to manage our Industrial development and provide for financing of future developments.


TRADING POST
TRAINING CENTER TRIBAL CO-OP
ZUNI TREASURY

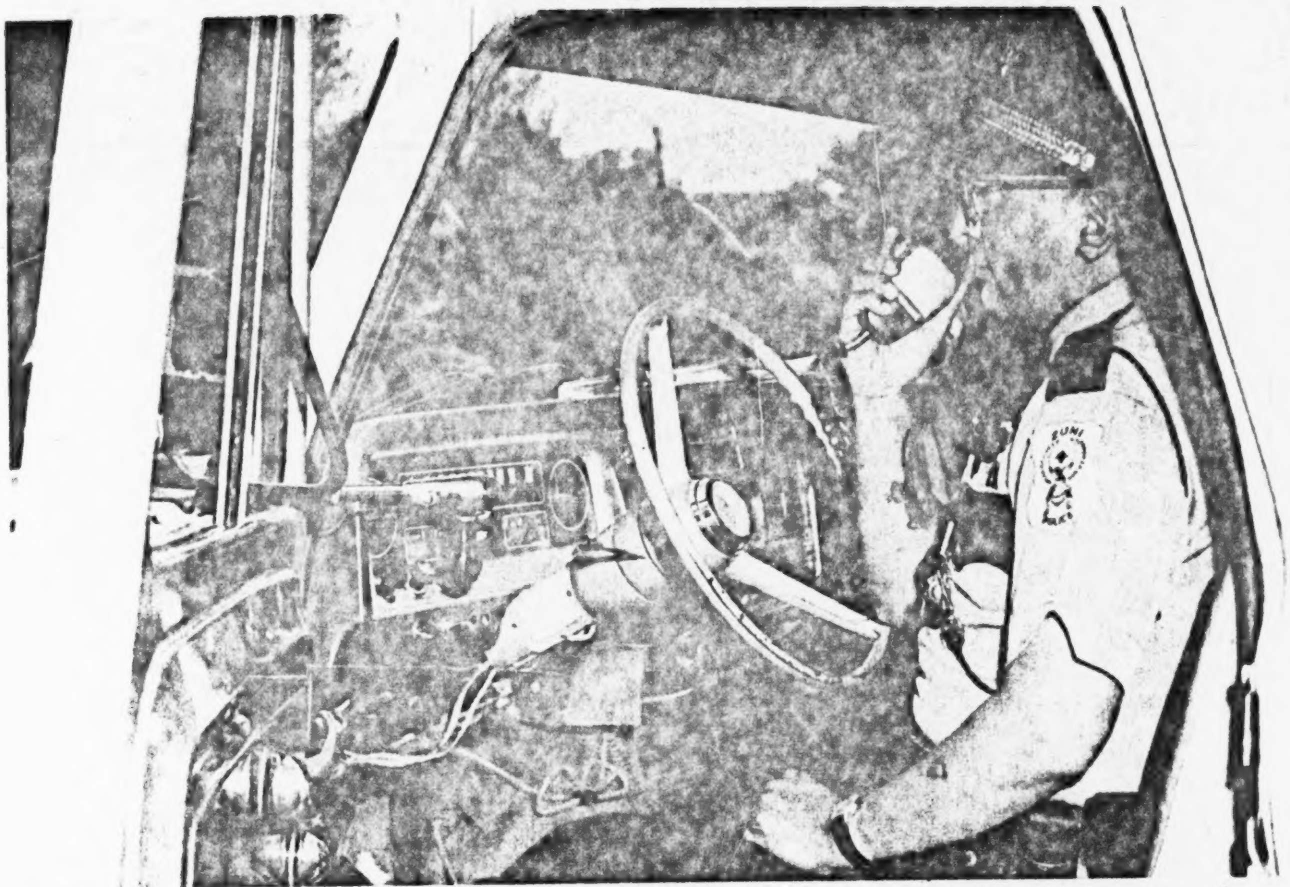
In 1967, we became the first and only Indian group to institute a tax on ourselves. It is a sales tax, which is paid by all of us, and is used for the benefit of the total Pueblo membership.



In 1968 we obtained from Congress the authority to lease land for development for 99 years, instead of the 25-year limit.


ZUNI
COMMUNITY
BUILDING

Through application and demonstrated need, we have received approval for a badly needed Community Training facility.



in 1967, we took full responsibility for running our own Police Department by means of a contract with the Bureau. At present we are attempting to set up our court system, in compliance with the "Indian Civil Rights" Act, as well as formulating our Pueblo Law and Order Code.

Through our Housing Authority, we have started our first planned subdivision, with 12 low income houses completed; 23 started and 65 approved for 1969; 185 planned for FY 1970 and 565 during the planning period 1971-75.

I am proud of my people and the great efforts they have made to improve their lot in life. However, our efforts have been, for the most part, singly made and always under-financed because of the limited capital available to the pueblo. We feel we now have the experience, interest, and ability to join the Federal Government in this comprehensive approach to overcoming our problems and meeting the development needs of our people and reservation resources.

OUR PROBLEMS

Zuni development problems are indentified and their impact summarized as:

	IMPACT (P & S)*		
Development Problems	**Educational**	**Economic**	**Community**
Poverty	S	P	P
Substandard Education	P	S	S
Lack of Skills		P	S
Cultural Isolation	P	P	P
Population Isolated		P	P
Health Problems	P	P	P
High Birth Rate	S	P	P
Inadequate Housing	S		P
Inadequate Roads		P	P
Deficiency of Resources		P	S
Lack of Credit		P	P
Fractionated Land Ownership		P	P
Legal Problems		P	P
Underfunded Public Safety and Courts System	S	S	P

* P – Primary impact.
S – Secondary impact.

Indicators of the above problems show the relative position of our Zuni people in the greater American society.

Poverty	**Zuni**	**United States**
Annual per capita income	$ 580	$2,460
Median family income	2,400	7,970
% of families w/less than $3,000 per year	60%	13%
% of households below poverty level	70%	11%
% of population employed (16 & over)	50%	58%
% employed part-time of those employed	38%	15%
Unemployed rate	17%	3.5%
Autos and light trucks per capita	0.1	0.4

Substandard Education	**Zuni**	**United States**
Pupil teacher ratio in public school	25.5	23.1
Median grade completed (25 & over)	9.0	12.1
% college graduates (25 & over)	.0%	19%
% high school graduates with some college (25 & over)	4%	38%
% high school graduates (25 & over)	15%	53%
% high school graduates (20 to 34)	32%	74%
% school age enrolled (5 to 17)	91%	95%

Cultural Isolation	**Zuni**	**United States**
% population 21 & over voting in public elections	33%	60%
% population 21 & over not usually speaking English in the house	81%	NA

Population Isolated	**Zuni**	**United States**
% households with telephone	9%	87%
Miles to railroad and airport	40	NA
Retail outlets per 1,000 population	3	9
Retail sales per capita	$ 140	$1,300

HEALTH PROBLEMS 1967

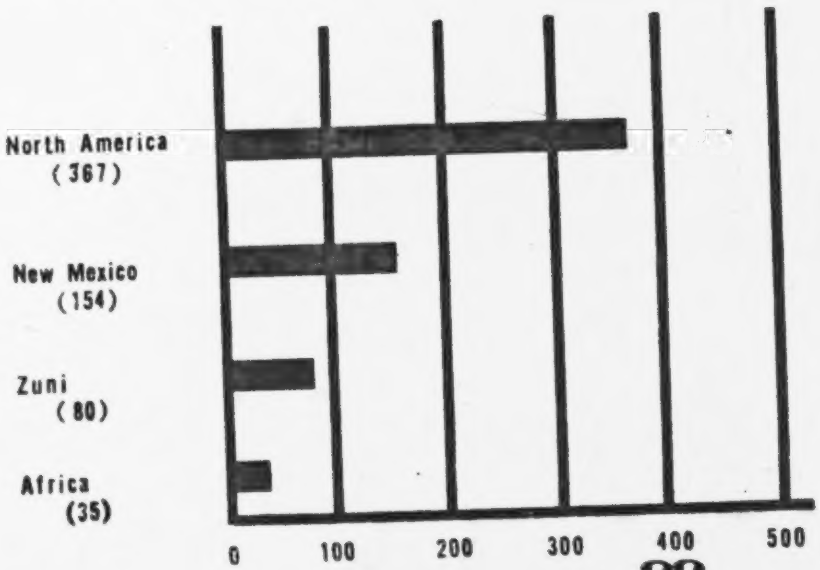
Notifiable Diseases (Per 1000,000 pop.)	**Indians in U.S.**[1/]	**United States**
Tuberculosis – new active	170	23
Rheumatic Fever	22	2
Strep Throat	2,943	229
Hepatitis	294	21
Measles	553	32
Gonorrhea	770	207
Syphilis	123	52
Pneumonia	3,680	NR
Otitis Media	8,099	NR
Gastroenteritis	6,712	NR
Influenza	993	NR
Trachoma	1,077	NR

Leading Causes of Death	**Times Higher than U. S.**
All Causes (Per 100,000 Pop.)	1.4
Accidents	3.9
Influenza & Pneumonia (Excl. new born)	2.4
Cirrhosis of the Liver	4.8
Diabetes	2.1
Gastritis	3.3
Tuberculosis (all forms)	8.0
Heart Diseases	.7
Malignant Neoplasms	.8
Vascular Lesions	.9

[1/] Multi-year average data for Zuni is typical of these annual figures for all Indians.
NR–Not reported.

	Zuni	United States
Infant Mortality Rate		
Infant Mortality (Per 100,000 Pop.)	27.5	22.4
High Birth Rate		
Annual Births per 1,000 Population	35.3	17.8
% of Population in Dependent Ages (Under 16 or over 65)	55%	42%
Inadequate Housing (from IHS survey)		
Median Persons Per Room	5	3
Indoor Toilets (Flush toilets)		
% Housing Units with Flush Toilets	54%	90%

Inadequate Roads



SURFACED ROADS
PER THOUSAND SQUARE MILES

Deficiency of Resources

Limited commercial forest resources have been sold. Additional significant sales will not be feasible before the year 2000.

Known mineral resources are non-existent on the reservation.

A limited surface and ground water supply.

Low forage and agriculture production.

Lack of Credit

Congressional restriction on use of Tribal land to secure financial development loans.

Fractional Land Ownership

The irrigation lands are fractionated into approximately 900 tracts, averaging from 5 to 10 acres in size, and varying from 1-acre garden tracts to 100-acre irrigation farms.

The rangelands are used by 335 sheep operators, averaging 45-sheep units in size and varying from 8-sheep units to 680-sheep units each; and 52 cattle operators, averaging 16-cattle units in size and varying from 1-cattle unit to 58-cattle units each.

Legal Problems

Federal trusteeship responsibilities for our land and income limit our ability to fully manage our own affairs. (The inability to sue or be sued tends to keep private development funds off the reservation.)

Underfunded Public Safety and Court System

	Zuni	United States
Crime rate per 1,000 population	268	22.5 (suburban)
Police per 1,000 population	.92	1.4 (suburban)
Police per 100 crimes	.48	6.2 (suburban)

OUR OBJECTIVE

The single overall objective toward which we are planning and working is:

> TO RAISE THE LEVEL OF LIVING FOR RESIDENTS OF THE ZUNI RESERVATION TO EQUAL OR TO EXCEED THE AVERAGE FOR ALL UNITED STATES CITIZENS.

To achieve our objective, we have set the following major goals to guide our comprehensive program plan:

1. INCREASE INDIVIDUAL INCOME to a level comparable with the average American through the creation of permanent employment opportunities on and near the reservation.
2. ENHANCE EDUCATIONAL OPPORTUNITY suited to our community needs, including an expanded headstart program, a public junior high school, high school vocational programs, and an improved pre-college curriculum to better equip our young people for achievement in the American society.
3. IMPROVE LIVING CONDITIONS in our Pueblo through a well-planned community providing adequate housing, sanitary environment, paved streets, utilities, commercial and public facilities, recreation, and other desirable programs.

U. S. POLICY AND ZUNI GOALS

Our major Pueblo goals, stated in a manner meaningful to Zunis, are the same as Federal and state policies established for Indians. President Nixon's statement released September 27, 1968, gave some distinct guidelines for the Federal Indian policy his administration will pursue:

"....We must recognize that American society can allow many different cultures to flourish in harmony, and we must provide an opportunity for those Indians wishing to do so to lead a useful and prosperous life in an Indian environment.

"....The right of self-determination of the Indian people will be respected and their participation in planning their own destiny will actively be encouraged.

"....The economic development of Indian Reservations will be encouraged and the training of the Indian people for meaningful employment on and off the reservation will be a high priority item.

"....My administration will . . . . aid them to live in prosperity, dignity and honor."

Though the words used by President Nixon differ from those we use, we are both speaking about individual income, better education, and better living conditions.

Every New Mexico administration in recent years has emphasized the necessity for advances in economic, social and community development – including the Indian citizens of the state. This inclusion of Indians has been echoed by local county commissioners, mayors, school boards and citizen action groups.

The situation at Zuni seems a near perfect setting to prove that the various Federal, state and local government agencies can effectively coordinate their assistance through the leadership of an Indian community to achieve their mutual program goals.

We live in accord with Zuni Pueblo concepts and, in the past, have asked or expected little of those not of our Pueblo. Now, we want to achieve a level of living such as other Americans enjoy. We have a long way to go in a short period of time.

Zunis want to retain their identity – not the moccasin and feather image – but the cultural and historical identification any man uses to reflect pride of his forefathers and of their accomplishments and contributions to society.

This Comprehensive Development Program is providing us an official Pueblo plan of action to effectively work toward the achievement of our own goals on a continuing basis. It is the first time in modern history that we Zunis have set forth our own plans in such detail and published them for all to see. It is also the first time in history that such a magnitude and variety of technical and financial assistance have been available to Indian groups.

We intend to use our plan to improve the Zuni Reservation into a community where people can earn an adequate living and raise their children in dignity and honor, with liberty and justice for all future generations.

Our limited resources will not support the full implementation of the plan nor rapid progress on any major part of it. Therefore, we welcome the effective participation of all Federal and state agencies as set forth in the plan.

Summary

ZUNI COMPREHENSIVE DEVELOPMENT PLAN

Our development plan encompasses a variety of projects designed and scheduled to achieve our major Pueblo development goals. The following program matrix portrays the main sections of the plan and highlights the cost, funding, and benefits over the five-year (1971-1975) planning period. The program matrix is followed by summary tables and graphs on total funding requirements, funding sources, income, and employment, followed by project briefs. Even though individual projects are intricately interdependent upon each other, for presentation purposes they have been grouped arbitrarily under the major goals.

PROGRAM MATRIX

IMPACT, BENEFITS, FUNDING

Planning Period Totals (1971-75)

Issues and Major Programs	Educational Impact	Social Impact	Economic Impact	Permanent Indian Employment (MY)	Indian Income ($ 000)	Highlights of Other Benefits During the Period	Federal Funding		
							Cost ($ 000)	Loans ($ 000)	Total ($ 000)
ENHANCE EDUCATIONAL OPPOR.				235	966		12,134	0	12,134
Educational Enrichment	P	S				Appreciation of Zuni culture, arts, language, music, etc.; 25% increase in facilities used; reduction to 20:1 teacher-pupil ratio; increased retention and learning rate.			
Pre-school, Special and Remedial	P					Language & cultural training for 800 Zuni children (ages 3 to 6).			
Counsel and Guidance	P	S	S			Reduction from 500:1 to 200:1 in guidance counselor-pupil ratio.			
Vocational Education	P		S			Vocational training opportunities for 2,600 students.			
Construction	P	S	S			One new elementary school for 500 students; one new high school, 600 student capacity; addition of 13 classrooms to exist-facilities for 260 students.			
IMPROVE LIVING CONDITIONS				204	830		24,763	1,788	26,551
Government Management	S	P	P			Development of modern governmental structure.			
Housing		P	S			565 low-income and 150 median-income homes.			
Community Improvement		P	S			45 miles of paved streets, sidewalks, curbs, gutters and storm drainage systems; gas distribution and garbage service for 1,300 homes.			
Health		P	S			Out-patient facilities for 100/day patients; child day-care center of 60/day capacity; one senior citizen home.			
INCREASE INDIVIDUAL INCOME									
Industrial Development		S	P	2,561	12,441	Three industrial plants and completion of industrial park.	11,916	2,162	14,078
Commercial Development		S	P	561	2,523	Forty commercial establishments & one shopping center.			
Tourism Development		S	P	127	721	Historic park & lake recreation area.			
			Subtotal	3,249	15,685				
			Total	3,688	17,481		48,813	3,950	52,763

P – Primary
S – Secondary
MY – Man-Years

SUMMARY TABLE OF FUNDING REQUIREMENTS BY SOURCE

Agency	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
BIA	3962.9	3471.9	2797.8	2267.2	1836.7	14336.5
BOR	425.0	.0	.0	.0	.0	425.0
DOT	375.0	.0	.0	.0	.0	375.0
EDA	239.5	72.0	202.8	.0	.0	514.3
Four Corners Commission	303.0	48.0	30.0	30.0	30.0	441.0
FWPCA	47.7	.0	.0	.0	.0	47.7
HEW	5539.3	1061.5	3078.2	1278.3	1458.4	12415.7
HUD	2959.0	2764.0	2716.0	2057.0	1008.0	11504.0
IHS	473.4	208.4	3041.7	174.7	94.7	3992.9
LEAA	22.5	22.5	22.5	22.5	22.5	112.5
NPS	734.1	582.2	641.0	674.6	567.8	3199.7
OEO	237.6	196.3	172.1	142.6	125.5	874.1
SCS	75.0	500.0	.0	.0	.0	575.0
Subtotal	15394.0	8926.8	12702.1	6646.9	5143.6	48813.4
Loans						
BIA	199.0	210.0	25.0	10.0	50.0	494.0
EDA	782.0	16.0	16.0	120.0	.0	934.0
HUD	1643.9	.0	.0	.0	.0	1643.9
SBA	568.4	130.5	40.5	84.2	54.0	877.6
Subtotal	3193.3	356.5	81.5	214.2	104.0	3949.5
Zuni Pueblo	259.4	271.8	289.5	329.6	381.3	1531.6
State of New Mexico	378.0	16.0	16.0	16.0	16.0	442.0
Private	284.6	90.5	77.5	165.0	25.0	642.6
TOTAL DEVELOPMENT COST	19509.3	9661.6	13166.6	7371.7	5669.9	55379.1

Funding . . . By Program . . . By Year

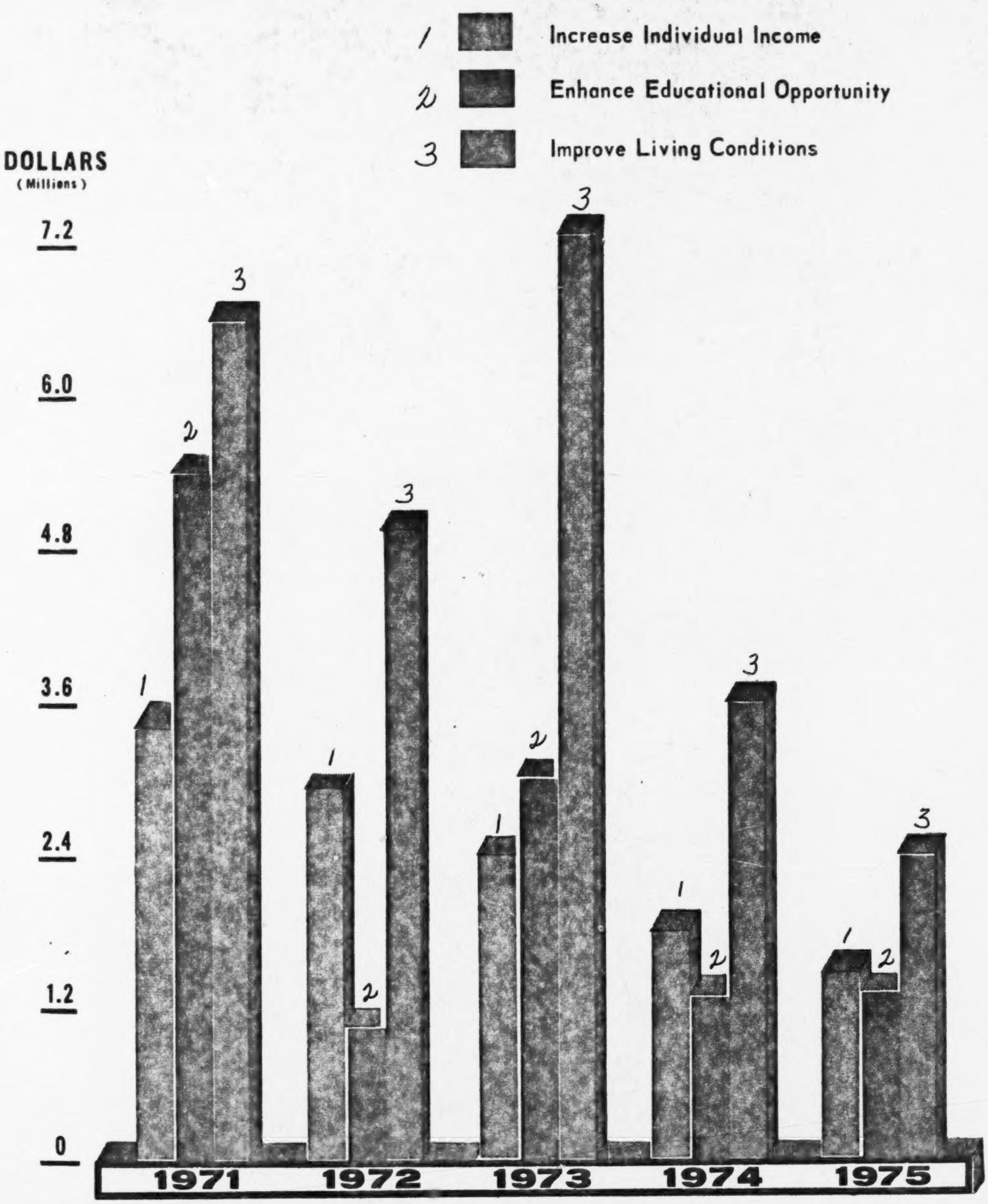


TABLE-FEDERAL COSTS BY PROJECT

INCREASE INDIVIDUAL INCOME

Projects	1971	1972	1973	1974	1975	Total
Industrial Development	561.1	506.4	626.0	571.1	382.2	2646.8
Commercial Development	130.5	12.0	13.8	13.3	12.2	181.8
Nutria Watershed	40.5	22.7	26.4	27.7	28.9	146.2
Nutria Tourism Development	1439.6	1248.1	646.9	34.4	42.6	3411.6
Historic Park	1216.5	1108.6	1078.4	1093.0	992.2	5488.7
Ojo Caliente	.0	15.2	26.0	.0	.0	41.2
Subtotal	3388.2	2913.0	2417.5	1739.5	1458.1	11916.3

ENHANCE EDUCATIONAL OPPORTUNITY

Tri-Semester Plan	147.3	179.4	207.1	248.3	284.0	1066.1
Reduce Teacher-Pupil Ratio	199.2	199.2	215.8	248.6	257.3	1120.1
Zuni Culture and Zuni Language-related Curriculum	17.3	17.0	11.8	8.3	8.3	62.7
Foreign Language	35.0	.0	.0	.0	.0	35.0
Arts and Crafts	8.3	8.3	8.3	8.3	8.3	41.5
Physical Education, Music and Arts Teachers, and Librarian-Media Specialists	144.5	144.7	145.0	189.8	190.1	814.1
Curriculum Study	100.0	.0	.0	.0	.0	100.0
Transportation	82.5	19.6	20.7	22.4	23.4	168.6
Teacher In-service Training	7.5	5.0	2.5	2.5	2.5	20.0
Headstart	132.4	132.4	132.4	132.4	132.4	662.0
Aides in Kindergarten, Pre-first and First Grades	42.0	42.0	42.0	63.0	63.0	252.0
Special Education	58.1	58.1	58.1	58.1	58.1	290.5
Remedial Reading	37.2	45.5	54.3	62.6	70.9	270.5
Guidance Counseling	99.8	110.3	122.1	122.1	135.6	589.9
Attendance Counselors	24.0	17.3	18.2	19.1	28.0	106.6
Vocational Building Trades	10.1	10.1	10.1	10.1	10.1	50.5
Vocational Agriculture	50.7	13.1	24.6	21.0	4.1	113.5
Home Economics	.0	.0	.0	.0	.0	.0
Business Education	27.9	27.9	27.9	27.9	27.9	139.5
General Basic Electricity	9.8	9.8	9.8	9.8	9.8	49.0
Vocational Auto Mechanics	11.3	11.3	11.3	11.3	11.3	56.5
School Building Needs	4165.0	.0	1900.0	.0	.0	6065.0
Administrative Overhead	12.4	10.5	11.2	12.7	13.3	60.1
Subtotal	5422.3	1061.5	3033.2	1278.3	1338.4	12133.7

IMPROVE LIVING CONDITIONS

Government Management	230.8	191.6	157.9	122.5	94.5	797.3
Low Income Housing	2560.0	2360.0	2370.0	1670.0	305.0	9265.0
Medium Income Housing	680.0	680.0	680.0	680.0	680.0	3400.0
Streets & Storm Drainage	1700.0	900.0	900.0	900.0	900.0	5300.0
Flood Control – Zuni	111.3	336.4	74.3	72.3	68.1	662.4
Flood Control – Ojo Caliente	79.7	315.6	36.1	22.2	22.2	475.8
Parks	54.0	54.0	36.0	27.0	18.0	189.0
Highway Bypass	375.0	.0	.0	.0	.0	375.0
Health Center	308.4	58.4	2891.7	74.7	74.7	3407.9
Day Care	74.0	29.0	78.1	33.1	82.3	296.5
Senior Citizens Care	99.3	27.3	27.3	27.3	102.3	283.5
Jail & Court	311.0	.0	.0	.0	.0	311.0
Community Recreation	.0	.0	.0	.0	.0	.0
Utility Development	.0	.0	.0	.0	.0	.0
Subtotal	6583.5	4952.3	7251.4	3629.1	2347.1	24763.4
Total Federal Costs	15394.0	8926.8	12702.1	6646.9	5143.6	48813.4

SUMMARY TABLE OF INCOME GENERATED BY PROGRAM

INDIAN WAGES
($ 000)

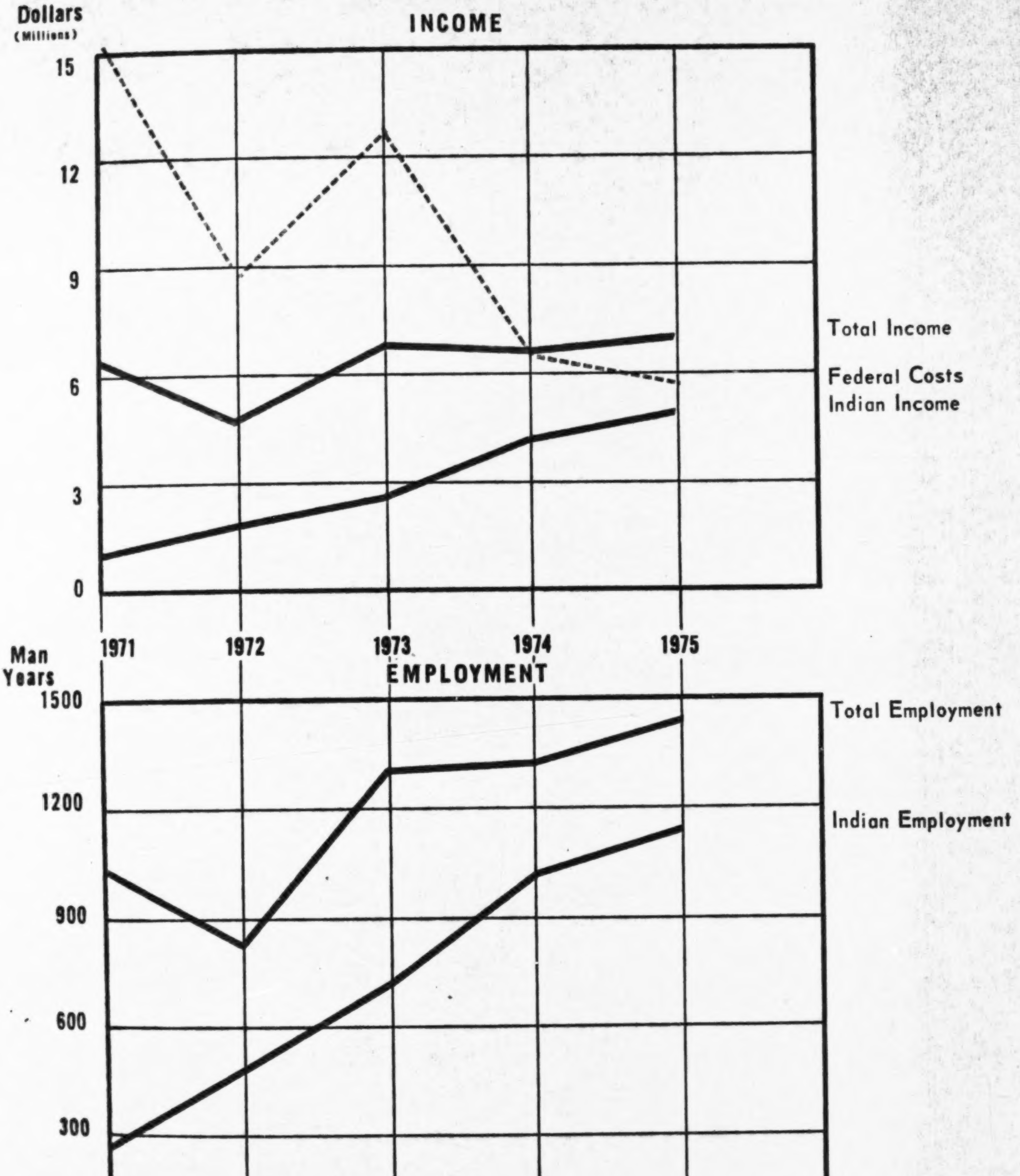
Section	1971	1972	1973	1974	1975	Total
Increase Individual Income	873.9	1520.9	2541.3	3580.7	4101.8	12618.6
Enhance Educational Opportunity	126.2	160.4	160.4	256.4	262.8	966.2
Improve Living Conditions	111.9	141.2	164.8	186.9	225.3	830.1
Total	1112.0	1822.5	2866.5	4024.0	4589.9	14414.9
NON-INDIAN WAGES **($ 000)**						
Increase Individual Income	271.4	423.7	532.7	629.0	621.1	2477.9
Enhance Educational Opportunity	600.8	628.4	661.6	696.5	729.7	3317.0
Improve Living Conditions	102.5	96.5	96.5	71.0	38.0	404.5
Total	974.7	1148.6	1290.8	1396.5	1388.8	6199.4
CONSTRUCTION WAGES **($ 000)**						
Increase Individual Income	1132.3	715.8	512.6	346.0	280.5	2987.2
Enhance Educational Opportunity	1041.3		475.0			1516.3
Improve Living Conditions	2029.9	1165.5	1773.8	846.1	557.4	6372.7
Total	4203.5	1881.3	2761.4	1192.1	837.9	10876.2
GRAND TOTAL	6290.2	4852.4	6918.7	6612.6	6816.6	31490.5

SUMMARY TABLE OF EMPLOYMENT GENERATED BY PROGRAM

INDIAN JOBS

Section	1971	1972	1973	1974	1975	Total
Increase Individual Income	229	393	654	922	1051	3249
Enhance Educational Opportunity	31	41	41	60	62	235
Improve Living Conditions	32	38	41	44	49	204
Total	292	472	736	1026	1162	3688
NON-INDIAN JOBS						
Increase Individual Income	25	39	49	56	56	225
Enhance Educational Opportunity	72	75	79	83	87	396
Improve Living Conditions	12	11	11	8	4	46
Total	109	125	139	147	147	667
CONSTRUCTION JOBS						
Increase Individual Income	199.0	136.0	106.0	81.0	69.0	591.0
Enhance Educational Opportunity	148.8	.0	67.9	.0	.0	216.7
Improve Living Conditions	291.4	146.1	248.6	120.3	79.2	885.6
Total	639.2	282.1	422.5	201.3	148.2	1693.3
GRAND TOTAL	1040.2	879.1	1297.5	1374.3	1457.2	6048.3

Impact of Federal Investment



Increase Individual Income

Proposed Funding ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
Federal	4888.6	3259.5	2474.0	1943.7	1512.1	14077.9
Other	422.3	184.2	142.1	226.1	90.4	1065.1
Total Development Cost	5310.9	3443.7	2616.1	2169.8	1602.5	15143.0

In May 1969, a sample survey was made in Zuni which indicates that, although progress is being made, income levels are low at Zuni. Per capita income in 1968 was only $580. This is less than one-fourth the national average. Seventy percent of the households are below the poverty level. Such households average eight persons in size, and they include 70 percent of the children at Zuni. The extra income that would have been needed in 1968 just to bring all poverty households up to the poverty line is almost 40 percent of the total income actually received by all Zunis.

The low income level is attributable to the poor quality of jobs available to the bulk of the labor force. Pay scales are low. At a minimum wage of $1.60 an hour for a full year, earnings would exceed $3,000. At Zuni, 80 percent of those working in 1968 earned less than $3,000. Even among those working full time for a full year, 65 percent earned less than $3,000.

Part-time and intermittent employment also keeps income low. Only 40 percent of those employed in 1968 worked full time 10 months or more. As of May 1969, one-half of the labor force held part-time jobs. Over a third of these people wanted full-time work.

Silversmithing is an important activity at Zuni. It was the principal income source for 50 percent of those working in 1968, and produced about 40 percent of the earned income. However, only 15 percent of the silversmiths earned $3,000 or more.

The unemployment rate at Zuni in May 1969 was 17 percent. This is about five times the national rate. The situation is actually worse than it appears, because many industrious Zunis, who would otherwise be unemployed, work part or full time at home as silversmiths for small returns. Some also find occupation as marginal workers or operators in agriculture.[1/] In summary, there are not enough steady jobs at above minimum wages at Zuni. The result is serious underemployment as well as unemployment.

The primary means of creating new job opportunities at Zuni has been in commercial and industrial development. Attracting industries to relocate in the Pueblo has proved to be a very effective technique of increasing income and employment at a relatively low cost. Other programs include the initiation of commercial and service enterprises and the development of reservation-based natural resources. All of these activities require multi-agency coordination. This presentation has as its central thesis the importance of total input planning not limited to any one organization or institution.

Fragmented attempts by a variety of Federal and other agencies have been made to increase individual income. In F. Y. 1969, $358,400 were committed. Requests and applications for F. Y. 1970, totaling $1,100,300, have been made according to available information.

The purpose of this section of the Zuni Plan is to assist in identifying income and employment opportunities. With proper coordination and funding, the creation of jobs at Zuni will further progress toward attaining national economic norms. Within the immediate five-year planning period, the goals are to increase annual per capita income from $580 to $1,200.

[1/] Five out of nine persons in the sample whose principal work was self-employment in agriculture reported cash earnings of $500 or less. The going rate for sheepherders is $1.50 a day.

Proposed programs:

1. INDUSTRIAL DEVELOPMENT

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
BIA (OJT)	554.1	498.4	456.8	565.8	376.1	2451.2
EDA (Grant)	.0	.0	160.0	.0	.0	160.0
OEO	7.0	8.0	9.2	5.3	6.1	35.6
Subtotal	561.1	506.4	626.0	571.1	382.2	2646.8
BIA (Loan)	150.0	200.0	.0	.0	.0	350.0
SBA (Loan)	270.0	.0	.0	.0	.0	270.0
Total Federal	981.1	706.4	626.0	571.1	382.2	3266.8

Present industrial employment is 176 (8 non-Indian) earning $742,500. Program is designed to provide 186 (5 non-Indian) new job opportunities earning $804,900 in F. Y. 1971 and 874 (24 non-Indian) over the planning period, with a total of $14,739,200 direct income generated.

2. COMMERCIAL DEVELOPMENT

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
EDA (Grant)	120.0	.0	.0	.0	.0	120.0
OEO	10.5	12.0	13.8	13.3	12.2	61.8
Subtotal	130.5	12.0	13.8	13.3	12.2	181.8
SBA (Loan)	50.9	31.5	20.7	84.2	54.0	241.3
EDA (Loan)	612.0	16.0	16.0	120.0	.0	764.0
Total Federal	793.4	59.5	50.5	217.5	66.2	1187.1
Private	284.6	90.5	77.5	165.0	25.0	642.6
Zuni Pueblo	36.4	3.5	2.3	3.8	6.0	52.0
Total Development Cost	1114.4	153.5	130.3	386.3	97.2	1881.7

Present commercial employment is 40 (8 non-Indian) earning $196,500. Program is designed to provide 108 (18 non-Indian) new job opportunities earning $601,500 in F. Y. 1971 and 189 (30 non-Indian) over the planning period, with a total of $4,588,100 direct income generated.

3. A. ZUNI-CIBOLA HISTORIC PARK

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
NPS	734.1	582.2	641.0	674.6	567.8	3199.7
4-Corners Commission	48.0	48.0	30.0	30.0	30.0	186.0
HUD	80.0	80.0	50.0	50.0	50.0	310.0
BIA	354.4	398.4	357.4	338.4	344.4	1793.0
Total Federal	1216.5	1108.6	1078.4	1093.0	992.2	5488.7
Zuni Pueblo	32.0	61.2	49.4	57.3	59.4	259.3
Total Development Cost	1248.5	1169.8	1127.8	1150.3	1051.6	5748.0

This program is the major element in the tourism development plan. For that reason, it has been separated from the other tourism projects. The Zuni-Cibola Historic Park will be the primary attraction in the development of tourist enterprises. The Zuni Pueblo will be a unique tourist attraction.

The program will also provide 18 (3 non-Indian) new job opportunities earning $169,200. In addition, a total of 383 temporary jobs in construction will be created over the planning period, with a total of $1,521,400 direct income generated.

3. B. NUTRIA TOURISM DEVELOPMENT ENTERPRISES

Funding by Agency ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
EDA (Grant)	119.5	72.0	42.8	.0	.0	234.3
BOR	425.0	.0	.0	.0	.0	425.0
4-Corners Commission	255.0	.0	.0	.0	.0	255.0
BIA	575.0	1156.0	581.0	.0	.0	2312.0
FWPCA	47.7	.0	.0	.0	.0	47.7
OEO	17.4	20.1	23.1	34.4	42.6	137.6
Subtotal	1439.6	1248.1	646.9	34.4	42.6	3411.6
SBA (Loan)	247.5	99.0	19.8	.0	.0	366.3
EDA (Loan)	170.0	.0	.0	.0	.0	170.0
Total Federal	1857.1	1347.1	666.7	34.4	42.6	3947.9
Zuni Pueblo	69.3	29.0	12.9	.0	.0	111.2
Total Development Costs	1926.4	1376.1	679.6	34.4	42.6	4059.1

Program is designed to provide 30 new job opportunities earning $477,300. In addition, a total of 140 temporary jobs in construction will be created over the planning period, with a total of $1,443,500 direct income generated.

3. C. NUTRIA WATERSHED TREATMENT

Funding by Agency ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
BIA	40.5	22.7	26.4	27.7	28.9	146.2

Program is designed to protect the investment reflected in No. 3. B., Nutria Tourism Development Enterprises.

3. D. OJO CALIENTE TOURISM DEVELOPMENT

Funding by Agency ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
BIA	.0	15.2	26.0	.0	.0	41.2

Program is designed to supplement No. 3. A., Zuni-Cibola Historic Park. Upon completion, it will provide $6,000 indirect income annually from tourists.

3. E. GAME AND FISH PLANNING

Funding by Agency ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
	.0	.0	.0	.0	.0	.0

No funding is required for this project because it encompasses future planning for utilization of the remaining watersheds on the Zuni Reservation.

Enhance Educational Opportunity

Proposed Funding ($ 000)	1971	1972	1973	1974	1975	Total
Federal	5422.3	1061.5	3033.2	1278.3	1338.4	12133.7

Education generally determines occupation, which largely determines income level. Years ago when the Zuni reservation was very isolated from the outside world, needs were simple. There was little emphasis on competition. Many of the basic consumer wants were satisfied on the reservation. It was important to know how to herd sheep, plant a garden, get along with your neighbor, and live a good life.

This has changed. The rapidly expanding Zuni population has exceeded the supportive capacity of the reservation resources and, therefore, the capability of family heads to support their families. It is becoming more and more necessary to have money for trading rather than relying on barter.

The most frequently expressed desire of the Zuni people is for steady employment at more than a minimum wage rate. To prepare the young people of Zuni for steady employment, it is essential that they be offered a basic education as good or better than that offered in an average American community. Because the circumstances existing on the Zuni Reservation are somewhat different, the educational program must be structured to prepare these young people to meet the challenges of two cultures. A cultural enrichment program is suggested to attempt to achieve the proper perspective on both cultures. At the same time, accreditation is a vital issue. One immediate goal of the plan is to structure the educational program to merit accreditation.

The college-oriented Zuni high school graduate is not adequately equipped with the necessary college preparatory courses. This plan calls for giving added emphasis to counseling and preparing those students planning to further their education.

Not all students, however, desire to continue their education. There will be vocational training and counseling available to those desiring this assistance. The vocational portion of the curriculum will be designed to interact with the guidance program assisting the student in selecting a future vocation. Presently, because of lack of staff, only the senior class high school students receive counseling. This plan envisions guidance being given throughout the school years to allow each Zuni youth a choice of vocational training or continued academic schooling.

At Zuni a bi-lingual culture exists. The school-aged child hears English while at school and the Zuni language for the remainder of the day. In the morning, a Zuni student must adjust his thinking and hearing processes to comprehend what is being said and taught in English. After the summer vacation it may require up to three months to regain comprehension of the English language. A tri-semester plan has been developed to begin to deal with this part of the bi-lingual problem.

General course content has been designed for non-Indian students. The student interest level is predictably low. Teachers have likewise been trained to teach non-Indian students. It is difficult for the teachers to develop empathy for Indian students, due to lack of knowledge of cultural traits. Special training of faculty personnel will be initiated within the scope of this plan to treat these problems.

The dropout problem also requires increased attention. Attendance counselors will be used to continue to decrease the dropout rate. The BIA has assigned their Probation and Parole Officer to work closely with dropouts and juvenile delinquents. Through these efforts the dropout rate was reduced from 25% to 11% in one year. Day-to-day attendance, however, is poor. There is a lack of interest on the part of some Zuni students and parents towards school in general.

Construction costs for the investment in facilities must also be considered during the planning period. The population growth at Zuni has far exceeded the capacities of the school buildings provided. For instance, Towa Yallone Elementary School, with twelve classrooms, was completed and occupied in January 1968. At that time 343 students were enrolled and two temporary buildings utilized. In FY 1969 the enrollment increased to 383 and it now appears that enrollment for FY 1970 will be 406.

The anticipated enrollments for all the Public Schools at Zuni are shown in the following table:

Year	Elementary	Jr. High	High School	Total
FY 1969	915	340	251	1,506
FY 1970	1,006	433	278	1,717
FY 1971	1,106	530	335	1,971
FY 1972	1,216	516	450	2,182
FY 1973	1,337	481	479	2,297
FY 1974	1,470	486	542	2,498
FY 1975	1,617	534	557	2,598

In addition, to these figures can be added 350 elementary students who attend the two reservation parochial schools. The parochial schools are able to maintain controlled enrollments consistent with their facilities. The Zuni Pueblo Council has passed a pueblo ordinance requiring attendance until age 18, or graduation from high school. However, to avoid students just sitting in the classes until they are 18, the curriculum will be restructured to command their interest as well as prepare them for later life.

To prepare Zuni children for a productive, meaningful existence, and to break the cycle of poverty at Zuni, it will require investment in buildings, annual costs of carrying out an exemplary educational program, and investment in special training for teachers in cross-cultural education.

All of these elements have been carefully considered in designing the program which is presented here as a part of the Zuni Comprehensive Development Plan.

Previously, a serious attempt, by Federal, State, and other agencies, has been made to provide an adequate educational system in the community. In FY 1969 $1,269,900 were committed. Requests and applications for FY 1970, totaling $1,417,900, have been made according to available information.

1. TRI-SEMESTER PLAN

Funding by Agency ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
HEW	147.3	179.4	207.1	248.3	284.0	1066.1

Operate a tri-semester school plan to provide maximum utilization of facilities and to offer students a more varied and more flexible school curriculum. The plan would also minimize the undesirable effect of a 3-month continuous vacation.

2. REDUCE TEACHER-PUPIL RATIO

Funding by Agency ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
HEW	199.2	199.2	215.8	248.6	257.3	1120.1

Program provides for more teacher-pupil contact by reducing classroom loads from the current ratio of 25.5 to 1, (29 to 1 in one school) to an average ratio of 20 to 1 or less.

3. ZUNI CULTURE AND LANGUAGE-RELATED CURRICULUM

Funding by Agency ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
HEW	17.3	17.0	11.8	8.3	8.3	62.7

Provide Zuni-oriented activities by completing elementary level Zuni language texts and teaching the Zuni language and culture as organized courses.

4. FOREIGN LANGUAGE

Funding by Agency ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
HEW	35.0	0	0	0	0	35.0

Provide facilities to pursue foreign language courses and improve the teaching of both English and Zuni.

5. ARTS AND CRAFTS

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	8.3	8.3	8.3	8.3	8.3	41.5

Provide courses and instruction in both arts and crafts. Presently this is a source of income to individual Zunis. These activities could be expanded into major sources as well as provide revenues for the Pueblo.

6. ELEMENTARY PHYSICAL EDUCATION, MUSIC AND ART TEACHERS AND LIBRARIAN-MEDIA SPECIALISTS

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	144.5	144.7	145.0	189.8	190.1	814.1

Make available special teachers for physical education, the fine arts, and library services, presently the most neglected area of the elementary school curriculum.

7. CURRICULUM STUDY

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	100.0	0	0	0	0	100.0

A professional study of the additional curriculum needs for Zuni children, from pre-school through high school, will be made by an independent group to establish an improved curriculum and assist in implementing it.

8. TRANSPORTATION FOR ENRICHMENT ACTIVITIES

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	82.5	19.6	20.7	22.4	23.4	168.6

Provide two 60 passenger buses to provide activity travel for Zuni children and to increase the annual travel allotment for each child from $1.00 to $10.00.

9. TEACHER IN-SERVICE TRAINING

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	7.5	5.0	2.5	2.5	2.5	20.0

Provide in-service training for teachers to help bridge the gap between available formal teacher education and the practical and unique needs of reservation teaching.

10. HEADSTART

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	132.4	132.4	132.4	132.4	132.4	662.0

To continue the Headstart program which has been effective in overcoming the language and cultural barriers faced by Zuni children entering school and in developing much needed self-confidence.

11. AIDES IN KINDERGARTEN, PRE-FIRST AND FIRST GRADES

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	42.0	42.0	42.0	63.0	63.0	252.0

Provide Zuni teacher aides to assist in communicating new ideas and concepts and to bridge the language and cultural gap.

12. SPECIAL EDUCATION

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	58.1	58.1	58.1	58.1	58.1	290.5

Provide special education for over 50 physically and mentally handicapped children who have need for this program.

13. REMEDIAL READING

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	37.2	45.5	54.3	62.6	70.9	270.5

Provide an expanded remedial reading program to bring Zuni reading abilities to a par with national averages. Provide special facilities and equipment and necessary in-service training for teachers to be more effective in the program.

14. GUIDANCE COUNSELING

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	99.8	110.3	122.1	122.1	135.6	589.9

Provide a ratio of one counselor to each 200 students and a supporting clerical staff.

15. ATTENDANCE COUNSELORS

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	24.0	17.3	18.2	19.1	28.0	106.6

Three attendance counselors and three vehicles are required to work with the guidance counselors, students and parents to reduce absenteeism.

16. VOCATIONAL BUILDING TRADES

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	10.1	10.1	10.1	10.1	10.1	50.5

Provide facilities and equipment to train Zunis in the expanding building trades.

17. VOCATIONAL AGRICULTURE

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	50.7	13.1	24.6	21.0	4.1	113.5

Provide expanded education for high school students in the agricultural trades.

18. HOME ECONOMICS

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	0	0	0	0	0	0

To provide enough home economics facilities and equipment to satisfy the demand for these popular and practical courses. (Cost included in School Building Needs Project).

19. BUSINESS EDUCATION

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	27.9	27.9	27.9	27.9	27.9	139.5

Expand existing facilities to provide business education for those interested in these courses. New courses will also be offered.

20. GENERAL BASIC ELECTRICITY

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	9.8	9.8	9.8	9.8	9.8	49.0

Provide a course in basic electricity to facilitate the employment of young Zunis in the growing electronics industries.

21. VOCATIONAL AUTO MECHANICS

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	11.3	11.3	11.3	11.3	11.3	56.5

Provide new facilities to offer comprehensive vocational programs in auto mechanics and other vocational trades.

22. SCHOOL BUILDING NEEDS

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	4165.0	0	1900.0	0	0	6065.0

To supplement Public Law 815 funds which do not provide funds for future growth or for non-classroom facilities. Also, to provide additional facilities which will be required to house new proposed education programs.

23. ADMINISTRATIVE OVERHEAD

Funding by Agency	1971	1972	1973	1974	1975	Total
HEW	12.4	10.5	11.2	12.7	13.3	60.1

To provide the necessary overhead costs in operation of this exemplary school program, 10% of the program cost excluding construction costs.

Other Benefits – In addition to the primary benefits, the following job opportunities and wages will be generated by the proposed 22 projects.

JOBS	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
Indian	31	41	41	60	62	235
Non-Indian	72	75	79	83	87	396
Total	103	116	120	143	149	631
WAGES ($ 000)						
Indian	126.2	160.4	160.4	256.4	262.8	966.2
Non-Indian	600.8	628.4	661.6	696.5	729.7	3317.0
Total	727.0	788.8	822.0	952.9	992.5	4283.2

In addition to the permanent employment, 217 man-years of temporary employment earning $1,516,300 in wages will be generated over the planning period in the construction phase of development.

Improve Living Conditions

Proposed Funding ($ 000)	1971	1972	1973	1974	1975	Total
Federal	8276.4	4962.3	7276.4	3639.1	2397.1	26551.3
Other	499.7	194.1	240.9	284.5	331.9	1551.1
Total Development Cost	8776.1	5156.4	7517.3	3923.6	2729.0	28102.4

Compared to the U.S. average, the general living conditions in Zuni are deplorable. Minimum progress is being made in the housing program, but, in general, the level of living gap between Zuni and the U.S. average is widening each year. Of the 536 houses at Zuni, only 146 have acceptable sanitary facilities. There are no paved streets, curbs, gutters, sidewalks, or storm drainage system in the Pueblo. The town is frequently flooded by the Zuni River that bisects the community.

Zuni has no facilities for care of older and invalid residents, or day care for children. There are no public parks. Inadequate facilities for health care, public education, utilities, courts, jail and Pueblo government management urgently require attention to provide services for local citizens.

Previously, a fragmented attempt, by a variety of Federal and other agencies, has been made to improve the living conditions. In F. Y. 1969, $1,399,700 were committed. Requests and applications for F. Y. 1970, totaling $3,199,400, have been made according to available information.

This portion of the plan is designed to chart the path of development to generally improve the living conditions in the community. Through the coordinated implementation of the following 14 basic projects during the five-year planning period and continued efforts, the goal is to close the level of living gap between Zuni and the U.S. average. This goal will provide an acceptable level of living for the Zunis to live in dignity.

1. PUEBLO GOVERNMENT MANAGEMENT

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
OEO	146.4	99.9	65.6	29.2	0	341.1
LEAA	22.5	22.5	22.5	22.5	22.5	112.5
BIA	61.9	69.2	69.8	70.8	72.0	343.7
Total Federal	230.8	191.6	157.9	122.5	94.5	797.3
Zuni Pueblo	99.1	158.5	207.3	251.9	300.3	1017.1
Total Development Cost	329.9	350.1	365.2	374.4	394.8	1814.4

These programs are designed to provide the Pueblo with a government structure capable of managing the Zuni development program and serving the people. The proposed structure under the Governor and Council includes administration and program direction and Departments of (1) Pueblo Utilities, (2) Budget and Finance, (3) Pueblo Services, and (4) Income and Employment.

2. LOW INCOME HOUSING

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HUD	2145.0	1950.0	1950.0	1300.0	260.0	7605.0
IHS	165.0	150.0	150.0	100.0	20.0	585.0
BIA (HIP)	250.0	260.0	270.0	270.0	25.0	1075.0
Total Federal	2560.0	2360.0	2370.0	1670.0	305.0	9265.0

Program is scheduled to build 565 houses in addition to the 250 houses programmed for F.Y. 1969 and F.Y. 1970. The 815 houses will provide for replacement of irreparable structures, overcrowding and population growth through 1975.

3. MEDIUM AND HIGH INCOME HOUSING

Funding by Agency ($000)	1971	1972	1973	1974	1975	Total
HUD	680.0	680.0	680.0	680.0	680.0	3400.0
BIA (Loan)	10.0	10.0	10.0	10.0	10.0	50.0
Total Federal	690.0	690.0	690.0	690.0	690.0	3450.0

Program provides 243 units during the planning period to replace sub-standard dwellings and meet growth needs for Indians and non-Indians whose income disqualifies them from low income housing, but is insufficient to permit entering into a standard commercial mortgage.

4. PUEBLO UTILITIES DEVELOPMENT

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HUD (Loan)	1643.9	0	0	0	0	1643.9
Total Federal	1643.9	0	0	0	0	1643.9
Zuni Pueblo	1.6	1.6	1.6	1.6	1.6	8.0
Total Development Cost	1645.5	1.6	1.6	1.6	1.6	1651.9

Program plans the construction of a gas distribution system through a HUD loan in 1971; expansion of the water and sewer system through Indian Health Service funds (see Low Income Housing Project); planned expansion of electric and telephone systems through agreements with respective firms; establishment of a trash and garbage service through concession to a private businessman; removal of all outdoor toilets, pig pens, corrals and chicken coops, as utility services are provided.

The total program will be managed by the Pueblo Utilities Department set forth in the project on Pueblo Government Management.

5. STREETS AND STORM DRAINAGE

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
BIA	1700.0	900.0	900.0	900.0	900.0	5300.0

Program includes 45 miles of paved streets, concrete curbs, gutters, a storm drainage system, two bridges and traffic signs to serve the Pueblo particularly for existing and new houses, commercial, industrial and tourism development areas.

6. FLOOD CONTROL FOR ZUNI COMMUNITY .

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
BIA	61.3	86.4	74.3	72.3	68.1	362.4
SCS	50.0	250.0	0	0	0	300.0
Total Federal	111.3	336.4	74.3	72.3	68.1	662.4

Program involves a Zuni River watershed plan. The plan calls for constructing flood retardation structures and watershed treatment to eliminate flood damage and health hazards in the community of more than 5,000 people. Secondary benefits are increased forage for livestock and protection of irrigated garden crops, community parks, and recreation facilities planned along the river.

7. OJO CALIENTE VILLAGE FLOOD CONTROL

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
BIA	54.7	65.6	36.1	22.2	22.2	200.8
SCS	25.0	25.0	0	0	0	275.0
Total Federal	70.7	315.6	36.1	22.2	22.2	475.8

Program primarily provides for updating the watershed plan, constructing flood retardation structures and watershed treatment to protect the lives and property of Ojo Caliente residents. Another benefit will be the protection of the historic village of Ojo Caliente (to be restored by National Park Service) and access roads, bridges and utilities. These facilities are outlined in other parts of this document, and also support the Zuni-Cibola Historic Park.

8. PARKS AND PUEBLO BEAUTIFICATION

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HUD	54.0	54.0	36.0	27.0	18.0	189.0
Total Federal	54.0	54.0	36.0	27.0	18.0	189.0
Zuni Pueblo	6.0	6.0	4.0	3.0	2.0	21.0
Total Development Cost	60.0	60.0	40.0	30.0	20.0	210.0

Program includes the elimination of polluted, contaminated and unsightly conditions along the river that currently result in a high incidence of dysentery, spread of disease, and lacerations. The project will provide a multi-purpose outdoor recreational park with tennis courts, picnic and play areas along beautifully landscaped river banks in the community. Facilities will be protected by the above-mentioned flood control project.

9. NEW MEXICO HIGHWAY #53 BYPASS

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
DOT	375.0	0	0	0	0	375.0
Total Federal	375.0	0	0	0	0	375.0
State of New Mexico	378.0	16.0	16.0	16.0	16.0	442.0
Total Development Cost	753.0	16.0	16.0	16.0	16.0	817.0

Program is designed to construct a bypass around the north side of the Pueblo and establish a Port of Entry to reduce the high speed, heavy truck traffic in the community. Safety hazards, noise level and deterioration of roads are major concerns. Increased State revenue from interstate truck traffic will be forthcoming. Citizens of Zuni will further benefit from the added convenience of automobile and operator's licenses for residents with the establishment of State offices. Four full-time jobs will also be created.

10. JAIL AND COURT FACILITIES

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
BIA	311.0	0	0	0	0	311.0

Program will provide an 8,000 sq. st. facility to: (1) house male and female prisoners, (2) retain minors, (3) provide jailor's quarters, (4) allow court room space, (5) provide judge's chambers and office space for court clerk, police chief, probation and parole officer, and juvenile officer.

11. ZUNI HEALTH SERVICES

Funding by Agency ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
IHS – Optimum	2891.7	74.7	74.7	74.7	74.7	3190.5
– Proposed	308.4	58.4	2891.7	74.7	74.7	3407.9

Program proposes to construct an outpatient facility to overcome the immediate problem of inadequate facilities for the provision of direct patient services for: (1) treatment of acute illnesses and chronic diseases, (2) maternal and child care, (3) emergency care, and (4) field follow-up of the above, as well as epidemiology and health education.

12. DAY CARE CENTER FOR CHILDREN

Funding by Agency ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
HEW	45.0	0	45.0	0	45.0	135.0
OEO	29.0	29.0	33.1	33.1	37.3	161.5
Subtotal	74.0	29.0	78.1	33.1	82.3	296.5
BIA (Loan)	15.0	0	15.0	0	15.0	45.0
Total Federal	89.0	29.0	93.1	33.1	97.3	341.5

Program will construct and operate a 20-child facility which will be expanded to care for 60 children by 1975 as the working mothers increase in number and new housing starts physically separate units of extended families.

13. FACILITY FOR SENIOR AND DISABLED RESIDENTS

Funding by Agency ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
HEW	72.0	0	0	0	75.0	147.0
OEO	27.3	27.3	27.3	27.3	27.3	136.5
Subtotal	99.3	27.3	27.3	27.3	102.3	283.5
BIA (Loan)	24.0	0	0	0	25.0	49.0
Total Federal	123.3	27.3	27.3	27.3	127.3	332.5

Program constructs and operates a pilot facility to provide full care for 6 people and provide day care for 12 people, with expansion by 1975. A better quality of care than is possible in the homes will be provided, plus releasing family members for employment and outside pursuits, resulting in improved level of living for both the recipients and the family.

14. COMMUNITY RECREATION

Funding by Agency ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
Zuni Pueblo	15.0	12.0	12.0	12.0	12.0	63.0

Program includes a director to plan, organize and supervise public recreation program for all ages, purchase of minor equipment and supplies, and oversee the community construction of ball diamonds and other facilities not available in schools and churches.

Other Benefits – In addition to the primary benefits, the following job opportunities and wages will be generated by the proposed 14 projects:

JOBS	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
Indian	32	38	41	44	49	204
Non-Indian	12	11	11	8	4	46
Total	44	49	52	52	53	250

WAGES ($ 000)						
Indian	111.9	141.2	164.8	186.9	225.3	830.1
Non-Indian	102.5	96.5	96.5	71.0	38.0	404.5
Total	214.4	237.7	261.3	257.9	263.3	1234.6

In addition to the permanent employment, 886 man-years of employment earning $6,372,700 in wages will be generated by the construction phase of development.

Zuni

Comprehensive Development Plan

VOLUME TWO

TABLE OF CONTENTS

TITLE PAGE

Introduction 3

Summary of Costs, Employment and Income 5

Projects 7

Increase Individual Income 9

1. Industrial Development Map deleted because of nonreproducibility 11
2. Commercial Development 15
3. Tourism Development 18
   (1) Zuni-Cibola Historic Park 18
   (2) Nutria Tourism Development Enterprise 28
   (3) Nutria Watershed Treatment 36
   (4) Ojo Caliente Tourism Development 36
   (5) Game and Fish Planning 36

Enhance Educational Opportunity 40

1. Tri-Semester Plan 40
2. Reduce Teacher-Pupil Ratio 41
3. Zuni Culture and Zuni Language Related Curriculum 42
4. Foreign Language 43
5. Arts and Crafts 43
6. Elementary Physical Education, Music and Art Teachers, and Librarian-Media Specialists 44
7. Curriculum Study 44
8. Transportation for Enrichment Activities 45
9. Teacher In-Service Training 45
10. Headstart 46
11. Aides in Kindergarten, Pre-First and First Grades 46
12. Special Education 47
13. Remedial Reading 47
14. Guidance Counseling 48

TITLE PAGE

15. Attendance Counselors........ 49
16. Vocational Building Trades........ 49
17. Vocational Agriculture........ 50
18. Home Economics........ 50
19. Business Education........ 50
20. General Basic Electricity........ 51
21. Vocational Auto Mechanics........ 51
22. School Building Needs........ 51
23. Administrative Expense........ 52

Improve Living Conditions........ 54

1. Pueblo Government Management........ 55
2. Low Income Housing........ 60
3. Medium and High Income Housing........ 64
4. Pueblo Utility Development........ 65
5. Streets and Storm Drainage........ 66
6. Flood Control for Zuni Community........ 69
7. Ojo Caliente Village Flood Control........ 69
8. Parks and Pueblo Beautification........ 72
9. New Mexico Highway #53 Bypass........ 72
10. Jail and Court Facility........ 73
11. Zuni Health Services........ 75
12. Day Care Center for Children........ 77
13. Facility for Senior and Disabled Residents........ 77
14. Community Recreation........ 79

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Introduction

ZUNI COMPREHENSIVE DEVELOPMENT PLAN

This volume contains the detailed back-up material for the total plan presented in summary form in Volume I. It is designed to meet the following Zuni objectives:

1. INCREASE INDIVIDUAL INCOME to a level comparable with the average American through the creation of permanent employment opportunities on and near the reservation.
2. ENHANCE EDUCATIONAL OPPORTUNITY suited to our community needs, including an expanded headstart program, a public junior high school, high school vocational programs, and an improved pre-college curriculum to better equip our young people for achievement in the American society.
3. IMPROVE LIVING CONDITIONS in our Pueblo through a well-planned community providing adequate housing, sanitary environment, paved streets, utilities, commercial and public facilities, recreation, and other desirable programs.

The following graphic chart portrays the organization of the plan as presented in Volume I and the arrangement of the back-up material in this volume. The Program Matrix highlights the federal funding and benefits over the five-year (1971-1975) planning period. This is followed by summary tables on total funding requirements, funding sources, employment and income. Project details under each major goal are prefaced with summary tables on program funding, employment and wages. Benefits are included in individual project material.

48

ZUNI COMPREHENSIVE PLAN

- **Increase Individual Income**
  - Industrial Development
  - Commercial Development
  - Tourism Development
    - Zuni-Cibola Historic Park
    - Tourism-Nutria
    - Nutria Watershed Treatment
    - Tourism-Ojo Caliente
    - Game & Fish Planning
- **Enhance Educational Opportunity**
  - Enrichment
    - Tri-Semester Plan
    - Teacher-Pupil Ratio
    - Culture & Language
    - Foreign Language
    - Arts & Crafts
    - P.E., Music & Arts
    - Curriculum Study
    - Transportation
    - Teacher In-Service
  - Pre-School, Spec. & Remedial
    - Headstart
    - Kindergarten, 1st & Pre-1st Aides
    - Special Education
    - Remedial Reading
  - Counseling & Guidance
    - Guidance Counselors
    - Attendance Counselors
  - Vocational Education
    - Building Trades
    - Vocational Agriculture
    - Home Economics
    - Building Trades
    - Vocational Agriculture
    - Business Education
    - Basic Electricity
    - Auto Mechanics
  - Construction
- **Improve Living Conditions**
  - Government Management
  - Housing
    - Low Income
    - Medium & High Income
  - Community Improvement
    - Pueblo Utilities
    - Streets & Storm Drain
    - Flood Control-Zuni
    - Flood Control-Ojo Caliente
    - Parks & Beautification
    - Highway By-Pass
    - Jail & Court Facility
  - Health
    - Zuni Health Center
    - Child Day Care
    - Senior & Disabled Resid.
    - Community Recreation

PROGRAM MATRIX

IMPACT, BENEFITS, FUNDING
Planning Period Totals (1971-75)

Issues and Major Programs	Educational Impact	Social Impact	Economic Impact	Permanent Indian Employment (MY)	Indian Income ($ 000)	Highlights of Other Benefits During the Period	Federal Funding		
							Cost ($ 000)	Loans ($ 000)	Total ($ 000)
ENHANCE EDUCATIONAL OPPOR.				235	966		12,134	0	12,134
Educational Enrichment	P	S				Appreciation of Zuni culture, arts, language, music, etc.; 25% increase in facilities used; reduction to 20:1 teacher-pupil ratio; increased retention and learning rate.			
Pre-school, Special and Remedial	P					Language & cultural training for 800 Zuni children (ages 3 to 6).			
Counsel and Guidance	P	S	S			Reduction from 500:1 to 200:1 in guidance counselor-pupil ratio.			
Vocational Education	P		S			Vocational training opportunities for 2,600 students.			
Construction	P	S	S			One new elementary school for 500 students; one new high school, 600 student capacity; addition of 13 classrooms to exist-facilities for 260 students.			
IMPROVE LIVING CONDITIONS				204	830		24,763	1,788	26,551
Government Management	S	P	P			Development of modern governmental structure.			
Housing		P	S			565 low-income and 150 median-income homes.			
Community Improvement		P	S			45 miles of paved streets, sidewalks, curbs, gutters and storm drainage systems; gas distribution and garbage service for 1,300 homes.			
Health		P	S			Out-patient facilities for 100/day patients; child day-care center of 60/day capacity; one senior citizen home.			
INCREASE INDIVIDUAL INCOME							11,916	2,162	14,078
Industrial Development		S	P	2,561	12,441	Three industrial plants and completion of industrial park.			
Commercial Development		S	P	561	2,523	Forty commercial establishments & one shopping center.			
Tourism Development		S	P	127	721	Historic park & lake recreation area.			
			Subtotal	3,249	15,685				
			Total	3,688	17,481		48,813	3,950	52,763

P – Primary
S – Secondary
MY – Man-Years

SUMMARY TABLE OF FUNDING REQUIREMENTS BY SOURCE

Agency	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
BIA	3962.9	3471.9	2797.8	2267.2	1836.7	14336.5
BOR	425.0	.0	.0	.0	.0	425.0
DOT	375.0	.0	.0	.0	.0	375.0
EDA	239.5	72.0	202.8	.0	.0	514.3
Four Corners Commission	303.0	48.0	30.0	30.0	30.0	441.0
FWPCA	47.7	.0	.0	.0	.0	47.7
HEW	5539.3	1061.5	3078.2	1278.3	1458.4	12415.7
HUD	2959.0	2764.0	2716.0	2057.0	1008.0	11504.0
IHS	473.4	208.4	3041.7	174.7	94.7	3992.9
LEAA	22.5	22.5	22.5	22.5	22.5	112.5
NPS	734.1	582.2	641.0	674.6	567.8	3199.7
OEO	237.6	196.3	172.1	142.6	125.5	874.1
SCS	75.0	500.0	.0	.0	.0	575.0
Subtotal	15394.0	8926.8	12702.1	6646.9	5143.6	48813.4
Loans						
BIA	199.0	210.0	25.0	10.0	50.0	494.0
EDA	782.0	16.0	16.0	120.0	.0	934.0
HUD	1643.9	.0	.0	.0	.0	1643.9
SBA	568.4	130.5	40.5	84.2	54.0	877.6
Subtotal	3193.3	356.5	81.5	214.2	104.0	3949.5
Zuni Pueblo	259.4	271.8	289.5	329.6	381.3	1531.6
State of New Mexico	378.0	16.0	16.0	16.0	16.0	442.0
Private	284.6	90.5	77.5	165.0	25.0	642.6
TOTAL DEVELOPMENT COST	19509.3	9661.6	13166.6	7371.7	5669.9	55379.1

TABLE-FEDERAL COSTS BY PROJECT

INCREASE INDIVIDUAL INCOME

Projects	1971	1972	1973	1974	1975	Total
Industrial Development	561.1	506.4	626.0	571.1	382.2	2646.8
Commercial Development	130.5	12.0	13.8	13.3	12.2	181.8
Nutria Watershed	40.5	22.7	26.4	27.7	28.9	146.2
Nutria Tourism Development	1439.6	1248.1	646.9	34.4	42.6	3411.6
Historic Park	1216.5	1108.6	1078.4	1093.0	992.2	5488.7
Ojo Caliente	.0	15.2	26.0	.0	.0	41.2
Subtotal	3388.2	2913.0	2417.5	1739.5	1458.1	11916.3

ENHANCE EDUCATIONAL OPPORTUNITY

Projects	1971	1972	1973	1974	1975	Total
Tri-Semester Plan	147.3	179.4	207.1	248.3	284.0	1066.1
Reduce Teacher-Pupil Ratio	199.2	199.2	215.8	248.6	257.3	1120.1
Zuni Culture and Zuni Language-related Curriculum	17.3	17.0	11.8	8.3	8.3	62.7
Foreign Language	35.0	.0	.0	.0	.0	35.0
Arts and Crafts	8.3	8.3	8.3	8.3	8.3	41.5
Physical Education, Music and Arts Teachers, and Librarian-Media Specialists	144.5	144.7	145.0	189.8	190.1	814.1
Curriculum Study	100.0	.0	.0	.0	.0	100.0
Transportation	82.5	19.6	20.7	22.4	23.4	168.6
Teacher In-service Training	7.5	5.0	2.5	2.5	2.5	20.0
Headstart	132.4	132.4	132.4	132.4	132.4	662.0
Aides in Kindergarten, Pre-first and First Grades	42.0	42.0	42.0	63.0	63.0	252.0
Special Education	58.1	58.1	58.1	58.1	58.1	290.5
Remedial Reading	37.2	45.5	54.3	62.6	70.9	270.5
Guidance Counseling	99.8	110.3	122.1	122.1	135.6	589.9
Attendance Counselors	24.0	17.3	18.2	19.1	28.0	106.6
Vocational Building Trades	10.1	10.1	10.1	10.1	10.1	50.5
Vocational Agriculture	50.7	13.1	24.6	21.0	4.1	113.5
Home Economics	.0	.0	.0	.0	.0	.0
Business Education	27.9	27.9	27.9	27.9	27.9	139.5
General Basic Electricity	9.8	9.8	9.8	9.8	9.8	49.0
Vocational Auto Mechanics	11.3	11.3	11.3	11.3	11.3	56.5
School Building Needs	4165.0	.0	1900.0	.0	.0	6065.0
Administrative Overhead	12.4	10.5	11.2	12.7	13.3	60.1
Subtotal	5422.3	1061.5	3033.2	1278.3	1338.4	12133.7

IMPROVE LIVING CONDITIONS

Projects	1971	1972	1973	1974	1975	Total
Government Management	230.8	191.6	157.9	122.5	94.5	797.3
Low Income Housing	2560.0	2360.0	2370.0	1670.0	305.0	9265.0
Medium Income Housing	680.0	680.0	680.0	680.0	680.0	3400.0
Streets & Storm Drainage	1700.0	900.0	900.0	900.0	900.0	5300.0
Flood Control – Zuni	111.3	336.4	74.3	72.3	68.1	662.4
Flood Control – Ojo Caliente	79.7	315.6	36.1	22.2	22.2	475.8
Parks	54.0	54.0	36.0	27.0	18.0	189.0
Highway Bypass	375.0	.0	.0	.0	.0	375.0
Health Center	308.4	58.4	2891.7	74.7	74.7	3407.9
Day Care	74.0	29.0	78.1	33.1	82.3	296.5
Senior Citizens Care	99.3	27.3	27.3	27.3	102.3	283.5
Jail & Court	311.0	.0	.0	.0	.0	311.0
Community Recreation	.0	.0	.0	.0	.0	.0
Utility Development	.0	.0	.0	.0	.0	.0
Subtotal	6583.5	4952.3	7251.4	3629.1	2347.1	24763.4
Total Federal Costs	15394.0	8926.8	12702.1	6646.9	5143.6	48813.4

SUMMARY TABLE OF INCOME GENERATED BY PROGRAM

Section	1971	1972	1973	1974	1975	Total
INDIAN WAGES ($ 000)						
Increase Individual Income	873.9	1520.9	2541.3	3580.7	4101.8	12618.6
Enhance Educational Opportunity	126.2	160.4	160.4	256.4	262.8	966.2
Improve Living Conditions	111.9	141.2	164.8	186.9	225.3	830.1
Total	1112.0	1822.5	2866.5	4024.0	4589.9	14414.9
NON-INDIAN WAGES ($ 000)						
Increase Individual Income	271.4	423.7	532.7	629.0	621.1	2477.9
Enhance Educational Opportunity	600.8	628.4	661.6	696.5	729.7	3317.0
Improve Living Conditions	102.5	96.5	96.5	71.0	38.0	404.5
Total	974.7	1148.6	1290.8	1396.5	1388.8	6199.4
CONSTRUCTION WAGES ($ 000)						
Increase Individual Income	1132.3	715.8	512.6	346.0	280.5	2987.2
Enhance Educational Opportunity	1041.3		475.0			1516.3
Improve Living Conditions	2029.9	1165.5	1773.8	846.1	557.4	6372.7
Total	4203.5	1881.3	2761.4	1192.1	837.9	10876.2
GRAND TOTAL	6290.2	4852.4	6918.7	6612.6	6816.6	31490.5

SUMMARY TABLE OF EMPLOYMENT GENERATED BY PROGRAM

Section	1971	1972	1973	1974	1975	Total
INDIAN JOBS						
Increase Individual Income	229	393	654	922	1051	3249
Enhance Educational Opportunity	31	41	41	60	62	235
Improve Living Conditions	32	38	41	44	49	204
Total	292	472	736	1026	1162	3688
NON-INDIAN JOBS						
Increase Individual Income	25	39	49	56	56	225
Enhance Educational Opportunity	72	75	79	83	87	396
Improve Living Conditions	12	11	11	8	4	46
Total	109	125	139	147	147	667
CONSTRUCTION JOBS						
Increase Individual Income	199.0	136.0	106.0	81.0	69.0	591.0
Enhance Educational Opportunity	148.8	.0	67.9	.0	.0	216.7
Improve Living Conditions	291.4	146.1	248.6	120.3	79.2	885.6
Total	639.2	282.1	422.5	201.3	148.2	1693.3
GRAND TOTAL	1040.2	879.1	1297.5	1374.3	1457.2	6048.3

Increase Individual Income

The detailed backup projects in this section are a planned program to provide new job opportunities and increase income to a level comparable with the average American.

FEDERAL FUNDING

Funding by Project ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
1. Industrial Development	561.1	506.4	626.0	571.1	382.2	2646.8
2. Commercial Development	130.5	12.0	13.8	13.3	12.2	181.8
3. Tourism Development						
A. Zuni-Cibola Hist. Park	1216.5	1108.6	1078.4	1093.0	992.2	5488.7
B. Nutria Tour. Devel. Ent.	1439.6	1248.1	646.9	34.4	42.6	3411.6
C. Nutria Watershed	40.5	22.7	26.4	27.7	28.9	146.2
D. Ojo Tourism Development	.0	15.2	26.0	.0	.0	41.2
E. Game & Fish Plan	.0	.0	.0	.0	.0	.0
Total	3388.2	2913.0	2417.5	1739.5	1458.1	11916.3

SUMMARY OF FUNDING SOURCES
(All Sources)

Funding by Agency ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
BIA	1524.0	2090.7	1447.6	931.9	749.4	6743.6
BOR	425.0	.0	.0	.0	.0	425.0
EDA	239.5	72.0	202.8	.0	.0	514.3
Four Corners	303.0	48.0	30.0	30.0	30.0	441.0
FWPCA	47.7	.0	.0	.0	.0	47.7
HUD	80.0	80.0	50.0	50.0	50.0	310.0
NPS	734.1	582.2	641.0	674.6	567.8	3199.7
OEO	34.9	40.1	46.1	53.0	60.9	235.0
BIA Loan	150.0	200.0	.0	.0	.0	350.0
EDA Loan	782.0	16.0	16.0	120.0	.0	934.0
SBA Loan	568.4	130.5	40.5	84.2	54.0	877.6
Private	284.6	90.5	77.5	165.0	25.0	642.6
ZUNI Pueblo	137.7	93.7	64.6	61.1	65.4	422.5
Total	5310.9	3443.7	2616.1	2169.8	1602.5	15143.0

Benefits – The following job opportunities and wages will be generated by the proposed project and sub-projects:

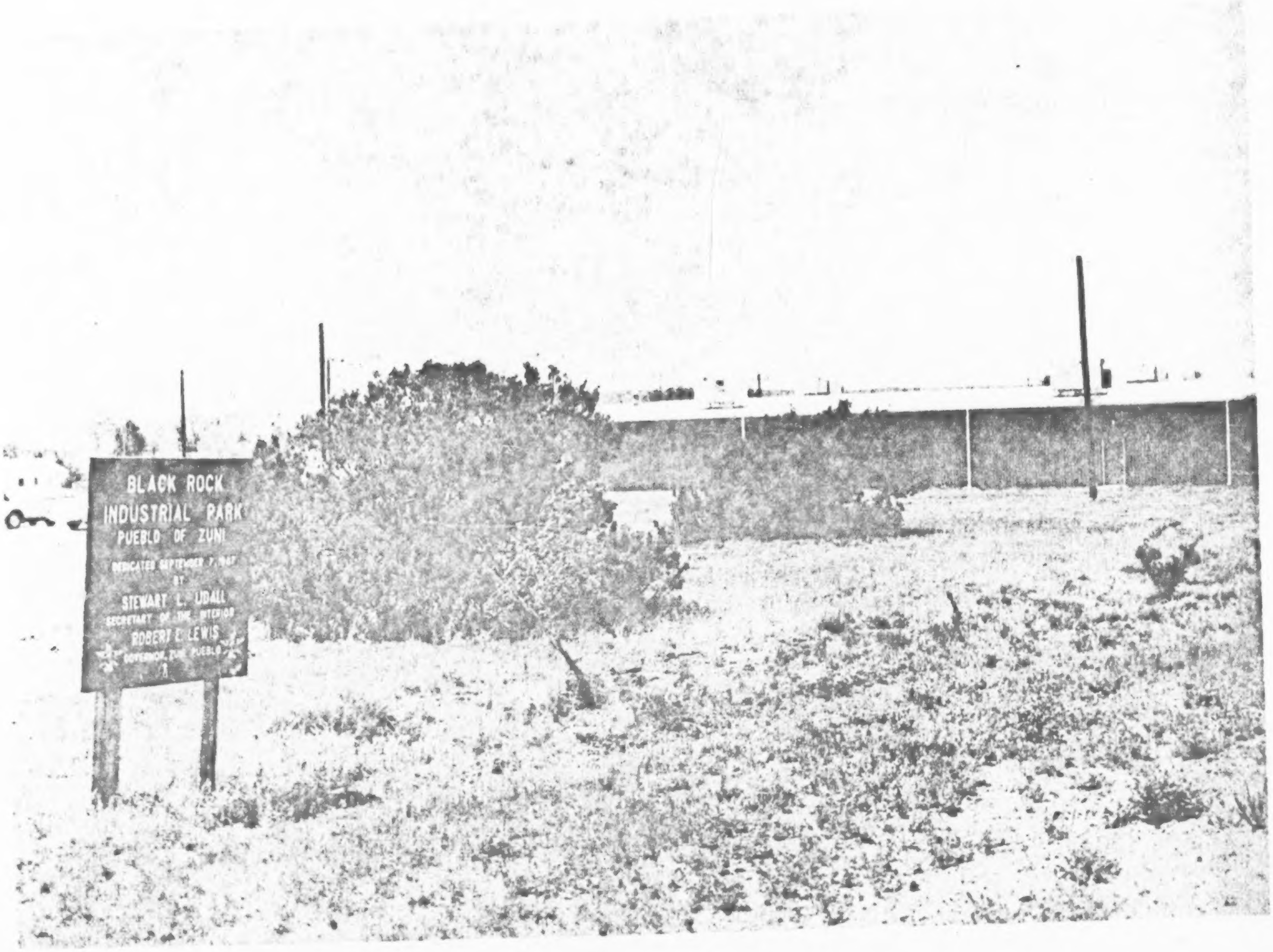
Jobs	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
Indian	229	393	654	922	1051	3249
Non-Indian	25	39	49	56	56	225
Permanent Employment	254	432	703	978	1107	3474
Construction	199	136	106	81	69	591
Total	453	568	809	1059	1176	4065

Wages ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
Indian	873.9	1520.9	2541.3	3580.7	4101.8	12618.6
Non-Indian	271.4	423.7	532.7	629.0	621.1	2477.9
Subtotal	1145.3	1944.6	3074.0	4209.7	4722.9	15096.5
Construction	1132.3	715.8	512.6	346.0	280.5	2987.2
Total	2277.6	2660.4	3586.6	4555.7	5003.4	18083.7

From the education and living conditions projects the job opportunities and wages which will be generated by the projects listed therein are shown on page 8.

1. INDUSTRIAL DEVELOPMENT

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
BIA OJT	554.1	498.4	456.8	565.8	376.1	2451.2
EDA	.0	.0	160.0	.0	.0	160.0
OEO	7.0	8.0	9.2	5.3	6.1	35.6
Subtotal	561.1	506.4	626.0	571.1	382.2	2646.8
BIA Loan	150.0	200.0	.0	.0	.0	350.0
SBA Loan	270.0	.0	.0	.0	.0	270.0
Total Federal	981.1	706.4	626.0	571.1	382.2	3266.8


BLACK ROCK
INDUSTRIAL PARK
PUEBLO OF ZUNI
DEDICATED SEPTEMBER 7, 1967
BY
STEWART L. UDALL
SECRETARY OF THE INTERIOR
ROBERT E. LEWIS
GOVERNOR, ZUNI PUEBLO

11/ 12

Description: This project lays out a course of action to fully utilize the Blackrock Industrial Park and the Zuni airstrip, funded by the Zuni Pueblo, Economic Development Administration, New Mexico State Aviation Board and the Federal Water Pollution Control Administration. In addition to the two existing electronics plants, it is anticipated that a leather goods manufacturer and two other industries will be fully operative by FY 1975.

One of the major constraints the Pueblo faces in achieving optimum industrial development is limited capital and source of loan funds. Even the 10% equity required under the Small Business Administration 502 Program is a severe drain on Pueblo Treasury funds. Therefore, full utilization of the Industrial Park will be limited unless additional long term, low interest loans and grants are made available. At the present time the BIA Revolving Loan Fund is the only source where 100% loans of this type can be obtained. Unfortunately, this is presently an undependable source because of lack of appropriated funds. Additional problems such as lack of housing and community facilities, treated in another portion of this document, must be solved in order to fully achieve industrial development at Zuni.

The course of action proposed is continuation of an active prospecting campaign through the BIA and OEO Industrial Development Specialists to fill the remaining lots in the Industrial Park. Upon completion, the goal of one thousand industrial jobs by 1975 will be achieved. In FY 1973 the finalization of the Industrial Park Project will be implemented wherein additional fire hydrants, paving and landscaping of the Park will be provided.

BENEFITS

PROJECTION OF NEW EMPLOYMENT

	1971		1972		1973		1974		1975		Total	
Indian/Non-Indian	**I**	**N**	**I**	**N**	**I**	**N**	**I**	**N**	**I**	**N**	**I**	**N**
Existing Plants	165	5	213	6	261	6	309	7	357	7	1305	31
Leather Goods			85	6	195	5	293	3	293	3	866	17
New Plants					50	5	140	14	200	14	390	33
Total	165	5	298	12	506	16	742	24	850	24	2561	81
Construction	15.7		7.1		5.7		0		0		28.5	

WAGES PAID

($ 000)	1971	1972	1973	1974	1975	Total
Indian	634.9	1146.7	1947.1	2855.2	3270.8	9854.7
Non-Indian	60.0	144.0	192.0	288.0	288.0	972.0
Total	694.9	1290.7	2139.1	3143.2	3558.8	10826.7
Construction	110.0	50.0	40.0	.0	.0	200.0

An additional benefit will be the increased demand in the community for services and commodities and will encourage the establishment of additional commercial businesses.

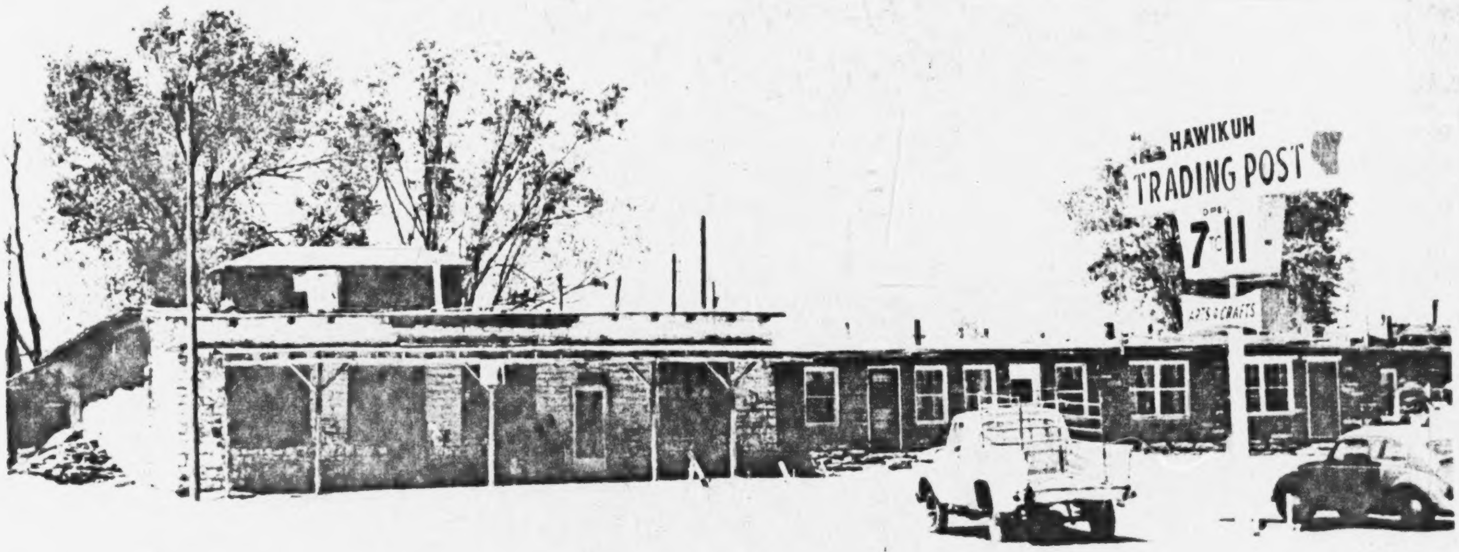
13 14

2. COMMERCIAL DEVELOPMENT

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
EDA	120.0	.0	.0	.0	.0	120.0
OEO	10.5	12.0	13.8	13.3	12.2	61.8
Subtotal	130.5	12.0	13.8	13.3	12.2	181.8
SBA (Loan)	50.9	31.5	20.7	84.2	54.0	241.3
EDA (Loan)	612.0	16.0	16.0	120.0	.0	764.0
Total Federal	793.4	59.5	50.5	217.5	66.2	1187.1
Private	284.6	90.5	77.5	165.0	25.0	642.6
Zuni Pueblo	36.4	3.5	2.3	3.8	6.0	52.0
Total	1114.4	153.5	130.3	386.3	97.2	1881.7

The BIA, through on-going programs, will provide supportive service for this program.

Description: In 1968, 16 retail businesses at Zuni, employing 33 Indians, had combined gross annual sales of $696,179. A recent survey indicated that, for the same period, there was a total of $4,332,290 of consumer spendable income at Zuni. Hence, only 16% of this amount was spent at Zuni.



The remaining 84% of the consumer spendable income is spent away from Zuni due to lack of shopping facilities, poor selection of merchandise and high prices. Due to the widespread underemployment and unemployment, the existing retail businesses must extend credit to their customers. The extension of credit combined with low sales volume has resulted in high prices. Muddy or dusty streets, and old fashioned, unattractive places to shop also contribute to low sales volume. On the other hand, average off-reservation communities of similar size have a wide variety of retail businesses and service establishments in the area to satisfy the needs and desires of the local residents. For instance, the non-Indian community of Aztec, New Mexico, with a population of approximately 5,000, has more than 100 retail and service establishments. For the purpose of this project, a list was compiled of thirty-five additional businesses which are needed in Zuni, and which, because of the expanding industrial base, can expect to operate profitably. This list depicts a conservative, attainable picture of commercial development in Zuni.

A commercial bank has obtained a charter to establish a branch at Zuni in 1969. Four different parties are interested in establishing a supermarket. These plus other interested businesses will form the nucleus for a complete shopping center.

Plans are to establish the shopping center using SBA and EDA loan funds to provide buildings for the tenants. EDA grant funds will be utilized for paving and utility extensions. The immediate goal is 12 retail businesses in FY 1971. Each year thereafter other businesses will be established, completing the shopping center and locating in other suitable sites throughout Zuni and at Blackrock.

A program of active prospecting for commercial clients to open retail or service establishments at Zuni will be continued. SBA will provide business management training seminars at Zuni for the benefit of anyone desiring to operate a business. The Pueblo will continue a program of land acquisition and site planning in order to achieve orderly development and business compatibility.

BENEFITS

PROJECTION OF EMPLOYMENT

	1971	1972	1973	1974	1975	Total
Indian	61	82	122	140	156	561
Non-Indian	17	21	27	27	29	121
Total	78	103	149	167	185	682
Construction	28.0	1.8	1.4	7.4	2.1	40.7

WAGES PAID

($ 000)	1971	1972	1973	1974	1975	Total
Indian	222.1	298.5	444.1	509.6	567.9	2042.2
Non-Indian	170.0	210.0	270.0	270.0	290.0	1210.0
Total	392.1	508.5	714.1	779.6	857.9	3252.2
Construction	195.8	12.8	9.8	52.0	15.0	285.4

Another important benefit of commercial development is illustrated in the following table:

GROSS SALES AND TRIBAL INCOME

($ 000)	1971	1972	1973	1974	1975	Total
Sales	710.2	2916.2	3137.2	3329.2	4221.2	14314.0
Sales Tax	7,102	29,162	31,372	33,292	42,212	143,140
License Fees	733	1,939	2,160	2,352	2,844	10,028
Tribal Income	7,835	31,101	33,532	35,644	45,056	153,168

3. TOURISM DEVELOPMENT

Funding by Project ($ 000)	1971	1972	1973	1974	1975	Total
3A Historic Park	1248.5	1169.8	1127.8	1150.3	1051.6	5748.0
3B Nutria Tourism	1926.4	1376.1	679.6	34.4	42.6	4059.1
3C Nutria Watershed	40.5	22.7	26.4	27.7	28.9	146.2
3D Ojo Caliente Tourism	.0	15.2	26.0	.0	.0	41.2
Total	3215.4	2583.8	1859.8	1212.4	1123.1	9994.5

Description: The Zuni Reservation is on the southern fringe of the major east-west tourist corridor, Interstate 40, which passes through the Southwestern United States. The tourism industry is reportedly the Southwest's third largest economic activity. According to a study made in 1965, the area in which Zuni is located has experienced, between 1960 and 1965, a 6% average annual growth in non-local tourists (i.e., tourists from over 150 miles away).

The increase in tourism in the Zuni area and the spending pattern of the non-local tourist indicate that there is a significant potential, from the tourist dollar, to the economy of Zuni. At present the Pueblo participates in the Southwest's tourist industry at an extremely low level. Consequently, there is little input of tourist-generated dollars into the Pueblo's economy. This lack of input is reflected in the low per capita income of the Zuni people.

The rapidly increasing population in McKinley and Valencia Counties of New Mexico indicates the importance of recreation in the immediate vicinity. The Zuni Reservation, endowed with many scenic vistas, ample water and a relatively high elevation, can readily be developed into an attraction for such activities.

The Zuni Reservation is located in these two counties, whose population in 1968 totaled 80,000. The community of St. Johns, Arizona, with an approximate population of 1,500, would also contribute visitations to the Zuni recreation areas. The largest source of visitation would be the population in Bernalillo County, which numbers 347,000. In 1968, Bluewater Lake State Park, near Grants in Valencia County, drew 203,245 visitors. Of this number, 62% were residents of Bernalillo County primarily from Albuquerque. These people traveled 102 miles to visit this body of water. The Zuni lakes are only 39 miles farther from Albuquerque. The extra distance is not considered a deterrent to these people visiting the Zuni recreation areas, provided proper facilities are developed. Out-of-state visitations are on the increase, and, though they may be minor compared to state visitations, they too, are attracted by well-developed recreation facilities. The mode of life the average American is beginning to assume is one placing more emphasis on outdoor recreation activities. More money is available for leisure-time activities, and people are looking farther for pleasant surroundings in which to spend this money.

This project is composed of the following subprojects:

A. Zuni-Cibola Historic Park
B. Nutria Tourism Development Enterprise
C. Nutria Watershed Treatment
D. Ojo Caliente Tourism Development
E. Game and Fish Planning

These combined sub-projects represent a totally integrated program for developing the tourism potential of the Zuni Reservation. These are intended to attract tourists to the Zuni Reservation and, combined with Commercial Development, make full utilization of tourist dollars.

3A. ZUNI-CIBOLA HISTORIC PARK

Sub-unit A: Development and Operation of Archeological and Historical Sites.
Sub-unit B: Development and Operation of Campground
Sub-unit C: Development and Operation of Zuni Pueblo Historic Zone

EXPLORE THE WONDERS OF ZUNI-CIBOLA

BLUEWATER STATE PARK: Fishing, boating, camping. Ideal ice fishing during winter months.

EL MORRO NATIONAL MONUMENT: A landmark for early-day Indian tribes, the Conquistadores, cavalry troops and westward bound wagon trains. Inscription Rock is a gigantic sandstone autograph album on which is carved Southwest history, dating back to 1605. Indian petroglyphs can be found of an even earlier period. Good hiking trail, Indian ruins, picnicking and camping facilities.

FENCE LAKE: A scenic land dotted with many prehistoric Indian ruins.

FORT WINGATE: A historic outpost of the U. S. Army, it has been home for such famous military leaders as John J. Pershing and Douglas MacArthur. Now the site of a large Indian Boarding School.

GALLUP: Because of its historic importance as an Indian trading center - principally for the Navajo and Zuni Tribes - Gallup claims the title of "Indian Capital." Site of the world's famous Inter-Tribal Indian Ceremonial, held each year beginning on the second Thursday in August. A gateway city to the Zuni-Cibola country.

GRANTS: Eastern gateway to the Zuni-Cibola area. Grants is known as the uranium capital because of its proximity to the largest known uranium deposits in the United States. Grants is located in the shadow of towering Mt. Taylor (11,389 ft.) East and south of Grants are huge lava-flow areas.

ICE CAVES: Some 3,000 years ago, according to Indian legend, a pointed mountain spewed boiling rock along valleys for miles and miles. This bubbling lava formed caverns - one of which is located here and contains formations of perpetual ice many feet thick. The volcanic crater is located here, too. Winter skiing is available.

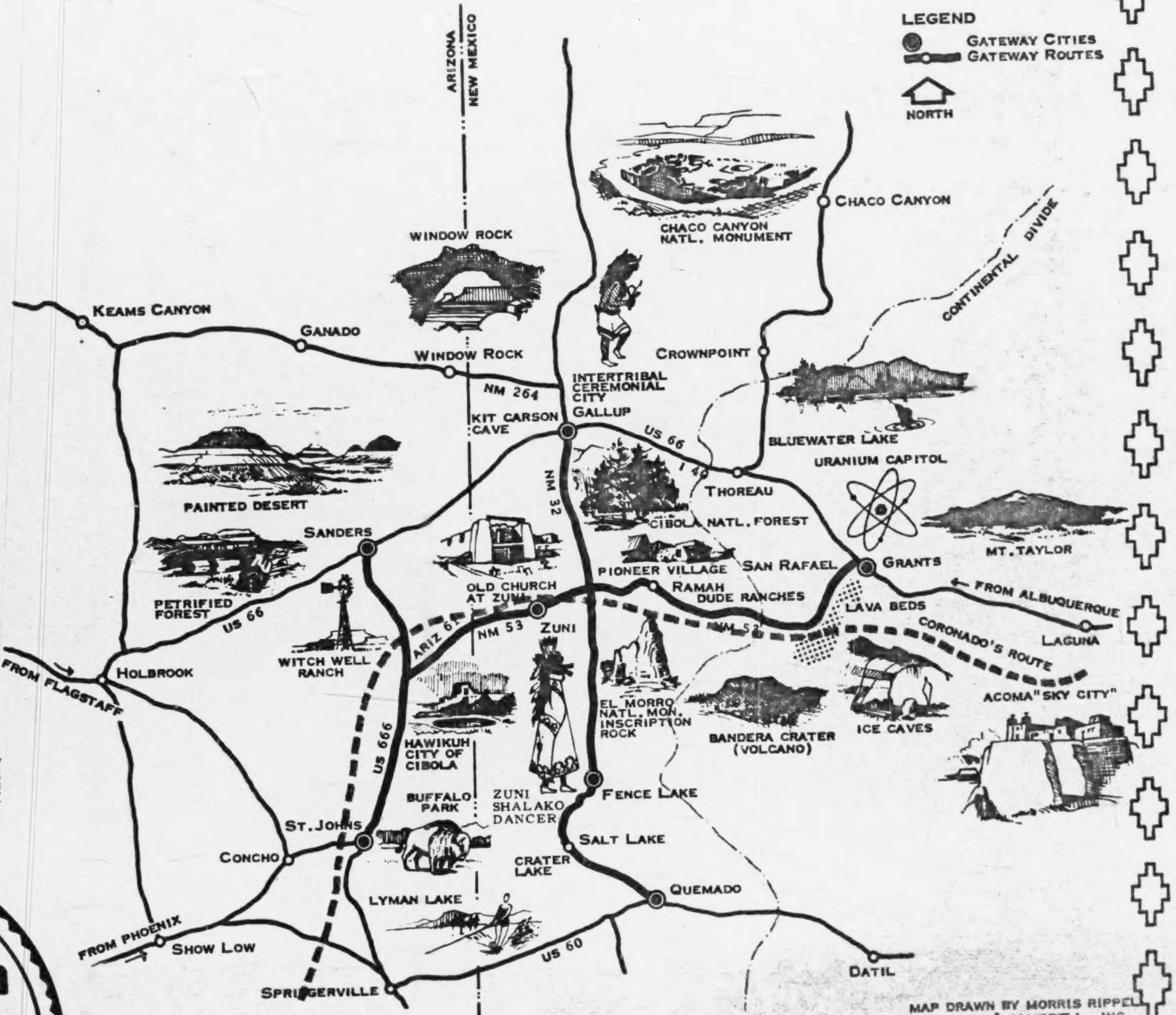
KIT CARSON CAVE: A small cavalry detachment, headed by Kit Carson, was bottled up for many days in this small cave near Gallup by a superior force of Indians. The soldiers had no food but the Indians who had no water finally gave up the siege.

McGAFFEY RECREATION AREA: In the tall Ponderosa Pine country of Cibola National Forest is the McGaffey Recreation Area. A beautiful camping area is near fishing, swimming and some of the finest hiking to be found anywhere.

RAMAH: This is the center of the Ramah-Navajo reservation land. Nearby is good fishing and beautiful wind-sculptured peaks of red and white rock - "The Giants". Ancient cliff dwellings and Indian ruins dot the area.

ST. JOHNS: Fishing, swimming and water skiing are offered at St. Johns, Arizona, just west of Zuni. Here, too, are located the Sierra Wacos, or "Hollow mountains." These high conical mountains have holes in the top of from 40' to 60' in diameter which widens as they go to varying depths in the mountains.

ZUNI PUEBLO: The oldest and largest pueblo in the United States, Zuni stands as a rear guard for an ancient civilization. Originally called Hawikuh, it was one of the "Seven Golden Cities of Cibola," sought by Coronado and the Conquistadores. It's history is stained by blood spilled not only in its defense against the Spaniards but in fighting off raiding parties from other tribes. A visit to Zuni is a face-to-face encounter with Southwestern history and one might happen upon a truly ceremonial dance at almost any time. Today it is a village of silversmiths and some of the finest inlaid silver jewelry found anywhere in the world is crafted here. On the reservation are fine, well-maintained camp grounds and fishing lakes. Guide service is available to some of the more than 100 ancient ruins and other attractions. Photographic and fishing permits are available from the Office of the Governor.


LEGEND
GATEWAY CITIES
GATEWAY ROUTES
NORTH
ARIZONA
NEW MEXICO
CHACO CANYON
CHACO CANYON NATL. MONUMENT
CONTINENTAL DIVIDE
WINDOW ROCK
KEAMS CANYON
GANADO
WINDOW ROCK
NM 264
CROWNPOINT
INTERTRIBAL CEREMONIAL CITY
GALLUP
KIT CARSON CAVE
US 66
I 40
BLUEWATER LAKE
URANIUM CAPITOL
THOREAU
NM 32
CIBOLA NATL. FOREST
MT. TAYLOR
PAINTED DESERT
SANDERS
PETRIFIED FOREST
US 66
PIONEER VILLAGE
SAN RAFAEL
GRANTS
FROM ALBUQUERQUE
OLD CHURCH AT ZUNI
RAMAH
DUDE RANCHES
LAVA BEDS
LAGUNA
ZUNI
NM 53
NM 53
CORONADO'S ROUTE
WITCH WELL RANCH
ARIZ 61
HOLBROOK
FROM FLAGSTAFF
EL MORRO NATL. MON. INSCRIPTION ROCK
BANDERA CRATER (VOLCANO)
ICE CAVES
ACOMA "SKY CITY"
HAWIKUH CITY OF CIBOLA
US 666
BUFFALO PARK
ZUNI SHALAKO DANCER
FENCE LAKE
SALT LAKE
ST. JOHNS
CRATER LAKE
CONCHO
QUEMADO
LYMAN LAKE
FROM PHOENIX
SHOW LOW
US 60
DATIL
SPRINGERVILLE

MAP DRAWN BY MORRIS RIPPEL
CHAMBERS & CAMPBELL, INC.

Zuni-Cibola Trails

Funding by Agency ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
NPS	734.1	582.2	641.0	674.6	567.8	3199.7
Four Corners Commission	48.0	48.0	30.0	30.0	30.0	186.0
HUD	80.0	80.0	50.0	50.0	50.0	310.0
BIA	354.4	398.4	357.4	338.4	344.4	1793.0
Total Federal	1216.5	1108.6	1078.4	1093.0	992.2	5488.7
Zuni Pueblo	32.0	61.2	49.4	57.3	59.4	259.3
Total	1248.5	1169.8	1127.8	1150.3	1051.6	5748.0

Description: The purpose of this project is to create the necessary economic base on which the Zunis can build a self-sustaining and fully viable tourist industry. In order to achieve this purpose the project is oriented towards the development of reservation resources that will appeal to the non-local market and will lengthen the stay of the tourist on the reservation. The first goal seeks to draw the tourist off Interstate 40 to the Zuni Reservation, and the second goal seeks to keep the tourist on the reservation for a day or two longer.

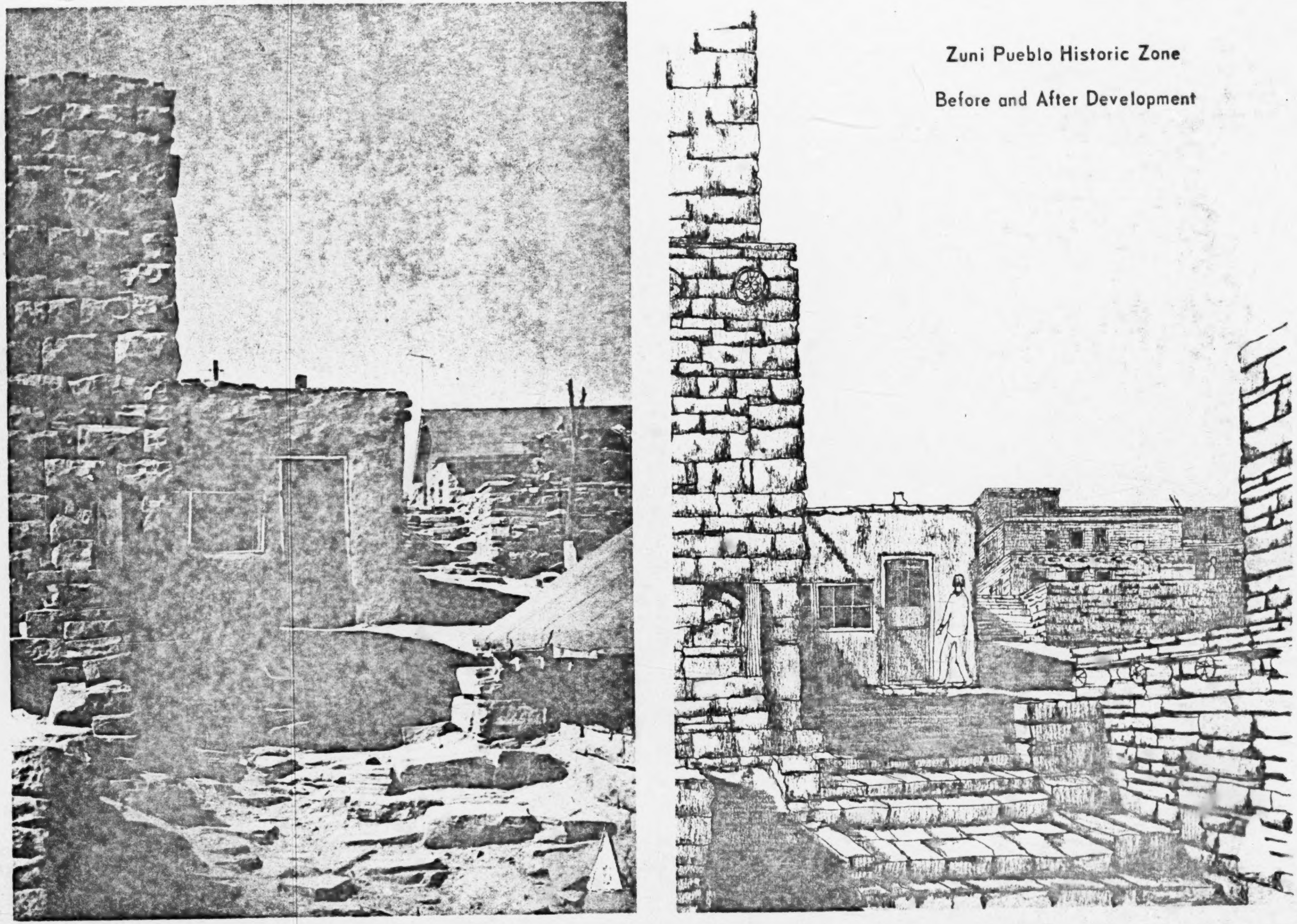
The distinctive cultural cast of the Zuni people, who are the lineal descendants of the inhabitants of the 16th century, fabled "Seven Cities of Cibola," is the major tourist resource of the Zuni Reservation. Past generations of the Zunis have successfully coped with such culture shattering experiences as the Spanish invasion and raids of the 16th century; the 17th and 18th century Spanish colonization effort with its program of directed culture change which sought to force on the Zunis the Spanish political, economic, familial, and religious institutions; and the 19th century American program of isolation and containment followed by a 20th century American program of intensive concern with the internal affairs of the Pueblo with its dual objectives of Zuni participation in American society and the development of economic independence. Indigenous Indian peoples of America of lesser cultural strengths than those of the Zuni have been assimilated and submerged by the dominant American culture of Western European origins. While the Zunis have accepted much of the material culture of America, and have borrowed some political concepts, they have effectively retained most of the political, familial, and religious way of life of their ancient cultural heritage.

This cultural heritage precedes the coming of the Western Europeans in the 15th century A.D. by almost 300 years, and probably goes back even further. The public aspects of the Zuni's colorful ceremonial life, their creative inventory of legends and myths, and their native handicrafts are cultural resources that will draw the tourist, as will the story of the Zuni people from prehistoric time to the present day. Scattered about the reservation are the remnants of Zuni history preserved in numerous significant archeological and historical sites which can form the stage for telling the history of Zuni. The historic Zuni Pueblo, still inhabited with its ancient church of Nuestra Senora de Guadalupe de Halona, the ruins of the 16th century Cities of Cibola, such as Hawikuh and Kechipawan, and the ruins of the villages of Yellow House, and the Great Kiva Ruins, inhabited by Zunis in prehistoric times, are all within the reservation boundaries and are but a few of the sites significant to the Zuni story.

This project seeks to create the economic base for a tourist industry through judiciously and sensitively controlled developments of these cultural and historical resources of the tribe. While the project itself is an important source of jobs for Zuni Indians, it is much more than that. It is a *sine qua non* of other tourist supported and job creating economic activities such as motels, food service establishments, and auto service stations, and it integrates well with the present and future programs for the development of other types of outdoor recreation resources of the reservation.

The Zuni-Cibola Historic Park project is proposed as a cooperative developmental and operational effort by the Zuni Pueblo, the National Park Service, Four Corners Commission, HUD and BIA. These agencies are the proposed major source of funds.

There are three major elements to the project: Development and Operation of Archeological and Historical Sites, Development and Operation of



Zuni Pueblo Historic Zone

Before and After Development

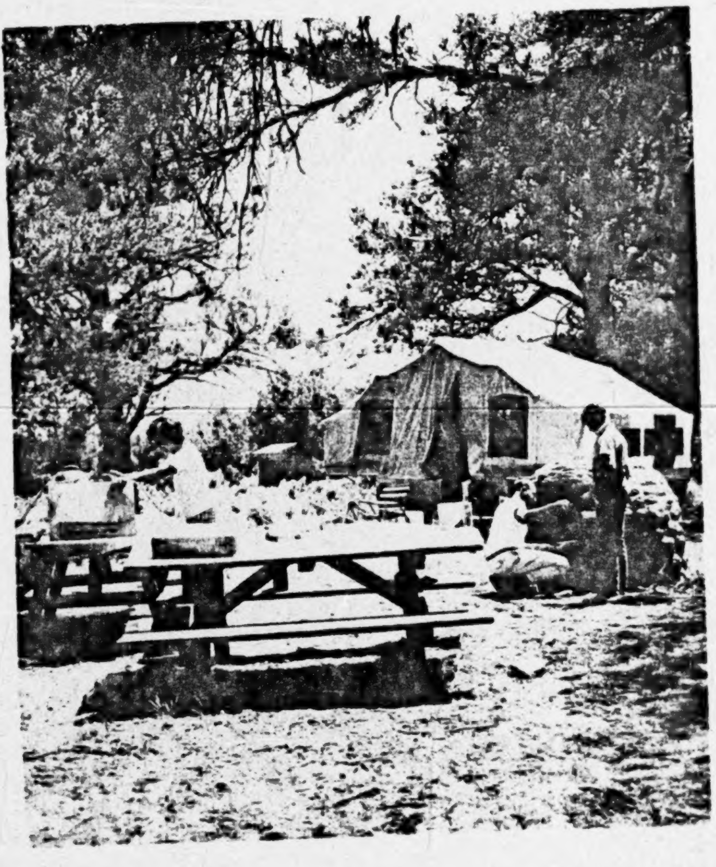
the Zuni Pueblo Historic Zone, and Development and Operation of the Campground. These major elements, however, are analytical categories only and should not be thought of as unrelated to each other. In fact, removal of any one will most assuredly damage, if not destroy, the ability of the project to create an economic base of sufficient magnitude to achieve the economic goal of a viable and self-sufficient tourist industry.

Experience has shown that what the tourist wants is a variety of activities of things to see and do, intermixed with different places to go and time to simply relax. Rather than take each part of this project and analyze it in detail, it is proposed here to show how the total project will function and thereby relate its parts to the whole. Perhaps the clearest cut way to achieve this is to "run" a typical visitor through the park in 1977 when it is completed.

The visitor of 1977 will arrive about three in the afternoon after a tiring and hot drive on Interstate 40 and will stop at the Visitor Center adjacent to the excavated Yellow House ruins at the junction of New Mexico State Route 32 with State Route 53. Here he will find out where he may set up camp, and perhaps take a five-minute run through the Yellow House ruins. He'll learn that for a fee, he and his family can stay at a first-class campground that has such facilities as showers, flush toilets, laundromat, snack bar, and limited-service grocery store, as well as the traditional type of camping unit consisting of table, parking place, and space for a tent or trailer. He'll also get a folder which tells him of the numerous other things happening in the park and on the reservation. For example, he will read that at 8:00 p.m. in the campfire circle at the campground, there will be a program in which Zuni Indians will relate their legends, or tell some of their history, or perform part of the public parts of their ceremonials. He will learn that there is a regular program of events centering on the Zuni Pueblo. For instance, while he is waiting to be given a guided tour of the Zuni Pueblo Historic Zone, for which he will pay a fee, he can look at the Zuni Cultural Museum that is in the Visitor Center, Museum, and Crafts Building of the Zuni Tribe. Here, also, he may purchase the products of Zuni craftsmen or watch them at work. After he has come back from his tour of the Historic Zone of the Pueblo, he may want to head for camp and relax awhile.

In the afternoon he can take a car caravan tour to Hawikuh, Ojo Caliente, the Sacred Springs and Kechipawan where he'll learn of the Spanish conquest, the significance of the Zuni Shalako Ceremony, and 19th Century Zuni village life. That evening the tourist and his family will attend another campfire program, though of a different topic than the one he went to the previous night.

The next day he will probably go back to Yellow House, where he spent only five minutes when he first arrived, to take a little better look. From here he'll go to the Great Kiva Ruins where he will learn of the earliest prehistory of Zuni. He now may go back to camp and leave the reservation; but probably only if he has to get back to



his home. If he has a day or two extra not committed to any specific purpose, he'll probably take a quick look at Matsaki-Taaiyalone, the Zuni place of refuge, and maybe get in his car and drive to El Morro National Monument. He may go back to the Zuni Pueblo for another look, and undoubtedly will stay for one more campfire program. Then the next day he'll leave to return to his urban home and tell all his friends what it is like "roughing it" in the land of Cibola and living with the Zuni Indians.

This "day in the life of a typical visitor" takes into account only the impact of the Zuni-Cibola Historic Park. Recreational fishing and hunting are already developed on the reservation, and these add additional incentives for the tourist to stay on "one more day." Other outdoor recreational pursuits, such as horseback riding, hiking, and the like, will further diversify the activities available to the visitor and encourage him to stay on "one more day."

The development of the park is detailed on Table 1 and summarized on Table 2. Basically, it is proposed that the NPS fund the development and operation of the archeological and historic sites with the BIA funding the supportive costs of utilities and roads; that the Zuni Pueblo, HUD, and Four Corners Commission fund the development of the Zuni Pueblo Historic Zone, and that the Pueblo operate the Historic Zone; that the NPS develop the campground facility with the Pueblo operating it on a concession basis; and the NPS, in cooperation with the Pueblo, operate the campfire program.

The projects seeks a major source of funding from the NPS and proposes that the NPS have managerial responsibility for operating the Archeological and Historical Sites portion of the Zuni-Cibola Historic Park. This is not without precedence. At the 40th meeting of the Secretary of Interior's Advisory Board on National Parks, Historic Sites, Buildings and Monuments, the ruins of Hawikuh, one of the Cities of Cibola, was declared to have exceptional value for illustrating Theme IV, "Spanish Exploration and Settlement" of the *Survey of Historic Sites and Buildings*, and the site was designated a National Historical Landmark.

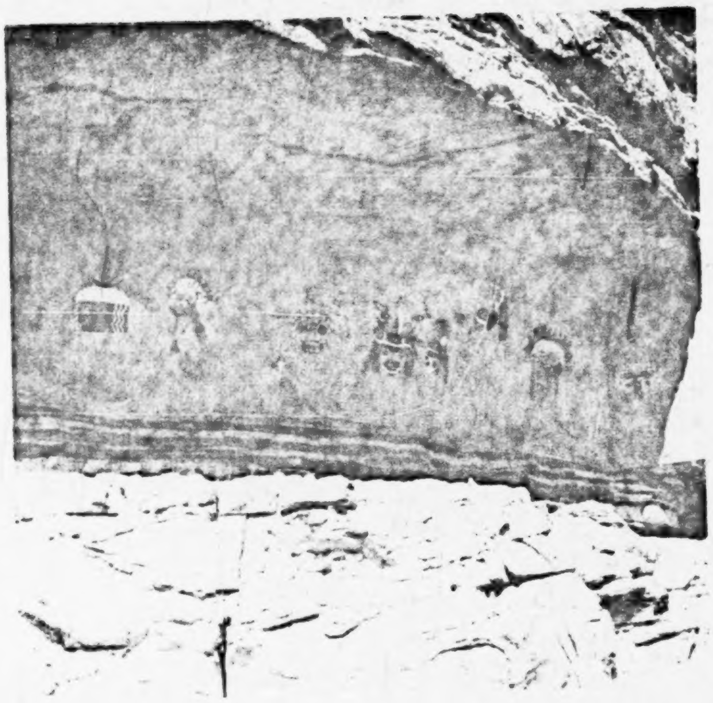
The Zuni Pueblo agrees with the findings of the Advisory Board and invites the Congress and the Secretary of the Interior to take a comprehensive look at the archeological and historical sites within the limits of the reservation as well as the culture of Zuni people. For Zunis believe, if the cultural, historical, and archeological resource values of the reservation are evaluated as an integrated whole, as proposed by this project, that a Zuni-Cibola Historical Park is merited and such a park would meet the most rigid criteria for inclusion in the National Park System.

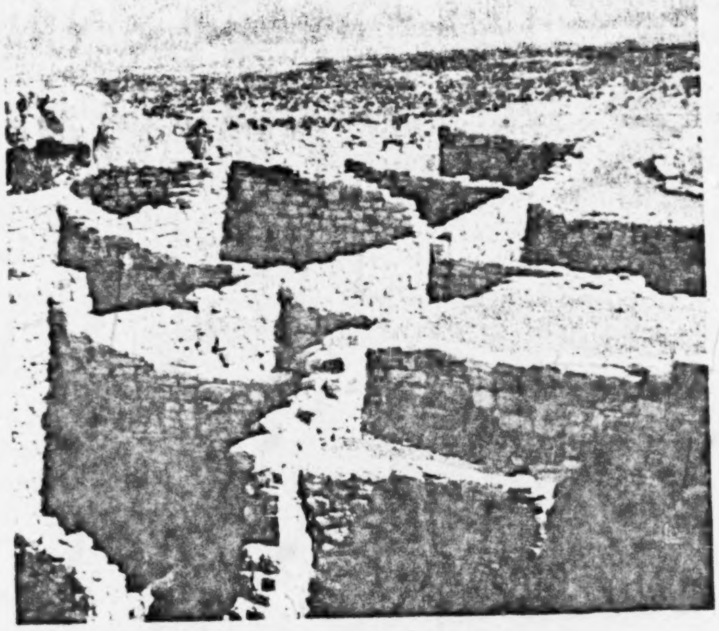
Here is the opportunity to create a living historical park that will illustrate to the American people the broad aspects of the cultural, political, economic, and social interaction between the sedentary village-living peoples of the Southwest and the invading, conquering Western Europeans over a period in excess of 400 years. Here is the opportunity to preserve a living vignette of cultures in contact. Here is an opportunity for the Zuni people to demonstrate with pride their viable, unique cultural cast; to reinforce their pride in their cultural heritage; and to illustrate to the American people at large the great value that resides in cultural self-determination. Finally, here is an opportunity to generate needed economic inputs for the Zuni Pueblo through the development of cultural, historical, and archeological resources for tourism development purposes while at the same time preserving what are nationally important aspects of the prehistoric and historic life of our country.

In the previous section the broad functioning of the Zuni-Cibola Historic Park from the point of view of tourist use was discussed. This was to emphasize that the concept behind this park project is an integrated and coordinated whole even though the project proposes to divide the operational costs between the NPS and the Zuni Pueblo, and it proposes to divide the total development costs among the Pueblo, the NPS, and other government agencies.

The development sequence is programmed for a period of 7 years from Fiscal Year 1970, when detailed planning studies should be completed, through Fiscal Year 1976, when the entire project should be completed. Table 1 portrays this sequence.

The major development and supportive costs proposed are for facilities to be used by the tourist. These are such things as access roads, a campground, and excavation and stabilization of ruins.





And the main operational costs are salaries directly attributable to interpretive services to the tourist or maintenance of facilities used by the visitor. The development and operation of the Archeological and Historical Sites is proposed as the responsibility of the NPS with supportive costs provided by other Federal agencies and the Pueblo. There are six development areas each, with different though complementary functions. Each portray a different though complementary aspect of the Zuni story.

Yellow House is to be the park headquarters, the point of initial visitor contact, the primary information point, and its ruins portray the Zuni prehistory prior to the coming of the Spanish. Hawikuh and Kechipawan present complementary stories of early contact with the Spanish. Ojo Caliente interprets Zuni life in a summer farming village at the turn of this century and the nearby Sacred Spring relates both to the farming in the area and the interpretation of the Shalako ceremonies in Zuni life. The Matsaki-Taaiyalone area was where the Zunis sought refuge many times when besieged by hostiles. The Great Kiva Ruins give promise of the early prehistoric period of the people who inhabited the area at the time the Zunis arrived here.

The development of the Campground is proposed as the responsibility of the NPS with supportive costs to be borne by the BIA. Its primary appeal is to the "luxury" camper so prevalent and so popular among American tourists. Its evening campfire program will serve as an interpretive focal point and will encourage tourists to stay overnight. The physical plant of the campground will be maintained by the NPS, but it will be operated on a concession basis by the Zuni Pueblo under contract with the NPS.

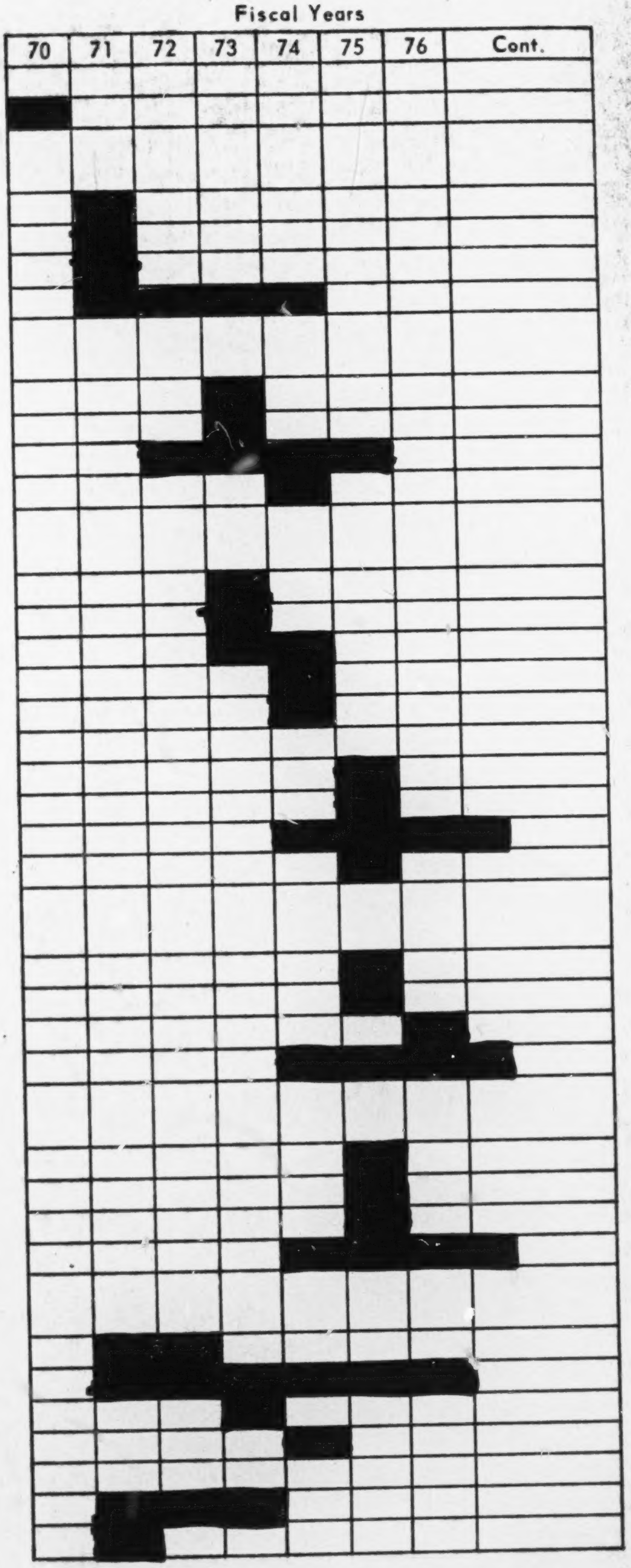
Development of the Zuni Pueblo Historic Zone will take place under a variety of funding sources including programs of HUD, Four Corners Commission, and the Pueblo. The basic objective here is to preserve the historic integrity of old Zuni Pueblo through a judicious and historically accurate restoration of existing historic buildings, removal of incongruent structures of recent origin, and undergrounding of modern-day utilities.

The Visitor Center-Museum-Craft Center will be provided by the Zuni Pueblo. Its operation, as well as the operation of the Historic Zone, will be the responsibility of the Pueblo and funded by them. The Zuni Pueblo Historic Zone and the associated Visitor Center-Museum-Craft Center is the core of the Zuni-Cibola Historic Park. Whereas other portions of the park deal with the dead past, this part deals with the living present and is the living demonstration of the Zuni culture.

Benefits: The results of this project are stated in terms of jobs created for Zunis and the income potential of these jobs. No attempt has been made to forecast the economic impact of the multiplier effect either in terms of ancillary jobs created or new income generated. Since this project is conceived of as essentially the development of the economic base for a self-sustaining tourist industry, only jobs actually needed to operate this economic base have been tabulated in this section. By way of highlighting the fact that this project was designed for maximum economic impact upon the Zuni people, it is pointed out that in the year 1975, of the total $136,800 proposed to be paid out in salaries for permanent employment, $93,700 will be paid to Zuni Indians occupying jobs created by this project. In 1975 the project will require 85.5 man years of employment of which 82.5 man years will be provided by Zuni Indians. Table 3 presents a summary of the income and employment created by this project.

Zuni-Cibola Historic Park

DEVELOPMENT SCHEDULE



	Fiscal Years							
	70	71	72	73	74	75	76	Cont.
Planning Studies	■							
Yellow House								
Access road		■						
Utilities to site		■						
Visitor Center		■						
Excavation/Stabilization		■	■	■	■			
Hawikuh								
Access road				■				
Utilities to site				■				
Excavation/Stabilization			■	■	■	■		
Contact Station/trails					■			
Ojo Caliente								
Access road				■				
Utilities to site				■				
Restoration of houses				■	■			
Contact Station/trails					■			
Interpretive Shelter/Sacred Springs					■			
Kechipawan								
Access road						■		
Utilities to site						■		
Excavation and Stabilization					■	■	■	■
Contact Station/trails						■		
Great Kiva Ruins								
Access road						■		
Protective fencing						■		
Interpretive Shelter							■	
Excavation/Stabilization					■	■	■	■
Matsaki-Taaiyalone								
Access road						■		
Utilities to site						■		
Contact Station/trails						■		
Excavation/Stabilization					■	■	■	■
Historic Zone – Zuni Pueblo								
Undergrounding of Utilities		■	■					
Restoration of Pueblo		■	■	■	■	■	■	
Re-alignment of Hawikuh road				■				
Visitor Center					■			
Campground (150 Units)		■	■	■				
Staff Housing (3 Units)		■						

TABLE 1

FUNDING REQUIREMENTS SUMMARY

	Fiscal Years							
	1970	1971	1972	1973	1974	1975	1976	Cont.
Development Funding Requirements								
National Park Service		$ 660.0	$ 475.0	$ 515.0	$ 515.0	$ 395.0	$235.0	$ 45.0 (c)
HUD, Four Corners Commission & Pueblo		100.0	100.0	100.0	100.0	100.0	100.0	.0
Supportive Funding Requirements								
BIA, HUD, Four Corners Commission		414.4	458.4	357.4	338.4	344.4	.0	.0
TOTAL – Development & Supportive Funding Requirements		$1,174.4	$1,033.4	$ 972.4	$ 953.4	$ 839.4	$335.0	$ 45.0 (c)
Operating Funding Requirements								
National Park Service (a)	$36.0	$ 74.1	$ 107.2	$ 126.0	$ 159.6	$ 172.8	$189.7	$196.0
Zuni Tribe (b)			29.2	29.4	37.3	39.4	45.9	53.5
TOTAL – Operating Funding Requirements	$36.0	$ 74.1	$ 136.4	$ 155.4	$ 196.9	$ 212.2	$235.6	$249.5
TOTAL – Development, Supportive, & Operating Funding Requirements	$36.0	$1,248.5	$1,169.8	$1,127.8	$1,150.3	$1,051.6	$570.6	$294.5 (c)

Notes

(a) 1970 FY figure is for planning studies.

(b) Revenue from operation of Campground is expected to off-set salaries paid to operate it.
Revenue from operation of Visitor Center-Museum-Craft Center is expected to off-set ½ of the salaries paid to operate it.

(c) This figure is final year of National Park Service Development Funding Requirement and is not included in the TOTAL – Development, Supportive, and Operating Funding Requirements.

TABLE 2

TABLE 3

SUMMARY EMPLOYMENT

	1971	1972	1973	1974	1975	Total
Man Years Indian	3.0	7.0	9.3	14.0	15.3	48.6
Non-Indian	3.0	3.0	3.0	3.0	3.0	15.0
Total Permanent	6.0	10.0	12.3	17.0	18.3	63.6
Construction	87.5	78.8	75.1	74.0	67.2	382.6

SUMMARY WAGES

($ 000)	1971	1972	1973	1974	1975	Total
Indian	16.9	42.9	55.4	83.4	93.7	292.3
Non-Indian	41.4	41.8	42.8	43.1	43.1	212.2
Total Permanent	58.3	84.7	98.2	126.5	136.8	504.5
Construction	349.2	314.0	298.7	294.0	265.5	1521.4

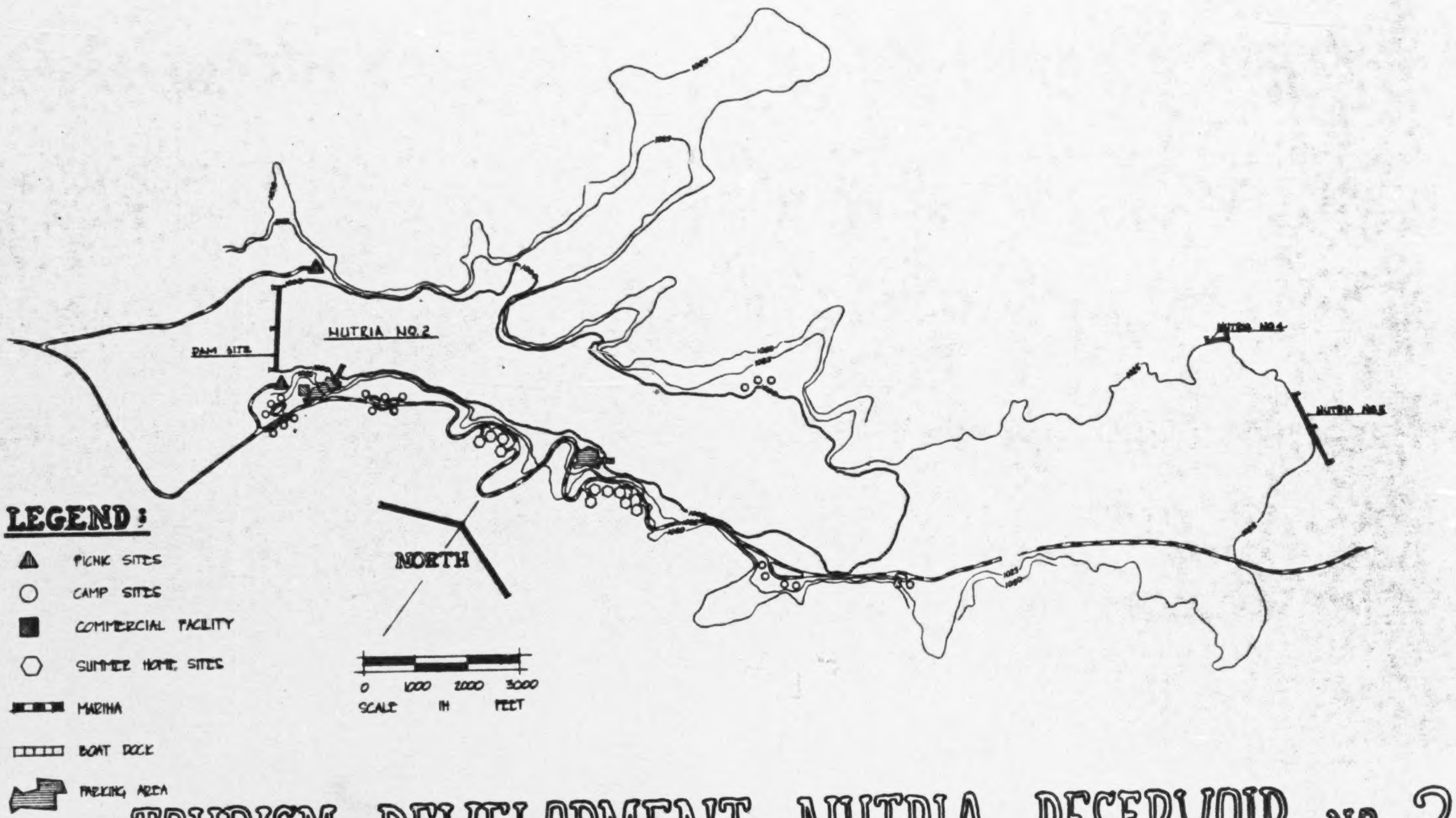
3B. NUTRIA TOURISM DEVELOPMENT ENTERPRISE

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
EDA (Grant)	119.5	72.0	42.8	.0	.0	234.3
BOR	425.0	.0	.0	.0	.0	425.0
4-Corners Commission	255.0	.0	.0	.0	.0	255.0
BIA	575.0	1156.0	581.0	.0	.0	2312.0
FWPCA	47.7	.0	.0	.0	.0	47.7
OEO	17.4	20.1	23.1	34.4	42.6	137.6
Subtotal	1439.6	1248.1	646.9	34.4	42.6	3411.6
SBA (Loan)	247.5	99.0	19.8	.0	.0	366.3
EDA (Loan)	170.0	.0	.0	.0	.0	170.0
Total Federal	1857.1	1347.1	666.7	34.4	42.6	3947.9
Zuni Pueblo	69.3	29.0	12.9	.0	.0	111.2
Total	1926.4	1376.1	679.6	34.4	42.6	4059.1

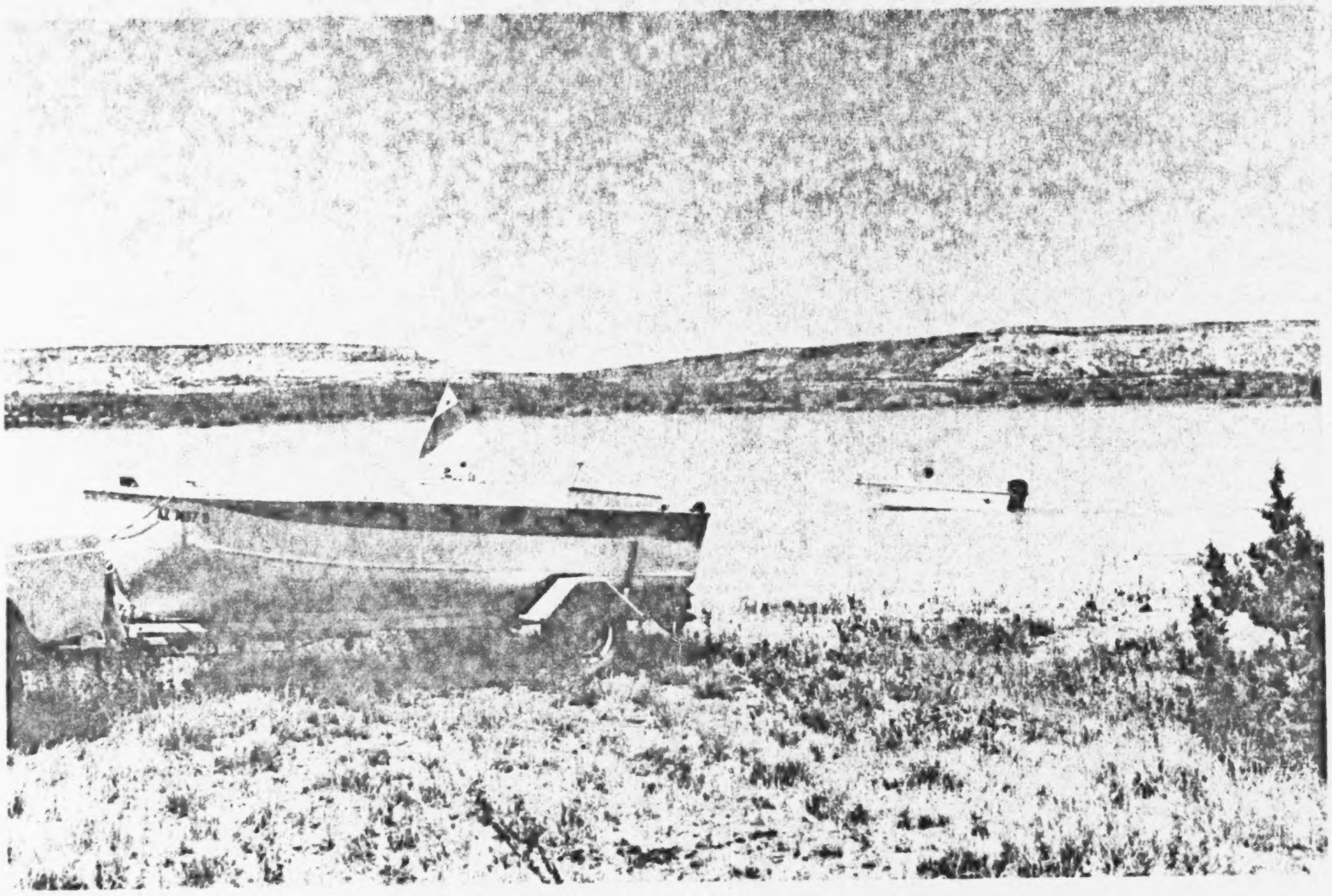
Description: This project is located in the Nutria Valley in which Nutria Reservoir #2 and Nutria Reservoir #4 are situated. The existing campgrounds and scattered picnic sites near Nutria #4 form a nucleus from which a Tourism Development Enterprise can be established.

Nutria #4 has provided excellent fishing in the past, and under proper fishery management, will do so in the future. It will be maintained solely as a fishery, with no boating or other water-based activities to be conducted at this site.

Nutria #2 displays exceptional potential for the development of various water-based and land-based activities. The dam will be raised 10 feet.


NUTRIA NO.2
DAM SITE
NUTRIA NO.4
NUTRIA NO.5
NORTH
0 1000 2000 3000
SCALE IN FEET
LEGEND:
▲ PICNIC SITES
○ CAMP SITES
■ COMMERCIAL FACILITY
⬡ SUMMER HOME SITES
MARINA
BOAT DOCK
PARKING AREA

TOURISM DEVELOPMENT - NUTRIA RESERVOIR NO. 2



increasing its spillway level 5 feet and enlarging the lake to 542 surface acres. Adequate water will be retained to maintain the lake at maximum spillway level.

Access to Nutria #2 is presently only fair. The direct route, State Highway 32, extends south from Interstate 40, from a junction at Gallup, New Mexico. State Highway 53 extends southwest from Interstate 40, from a junction at Grants, New Mexico. Both highways are scenic and provide easy access to attractions in Arizona, which, for many out-of-state persons, is a final destination in vacation planning.

The development of various archeological attractions on the Zuni Reservation, and particularly those close to Nutria #2, are discussed in another portion of this document. An additional attraction is water skiing on a lake approximately 2½ miles long and ½ mile wide, also swimming will be an attraction during the warm months of the year. Boating will be an enjoyable pastime on a lake this size, due to its favorable length. Under intensive fishery practices, this lake is described as an excellent fishery.

Camping, picnicking, and general sightseeing will be most compatible with the very attractive surroundings. Other activities that will be assimilated into the complex at this reservoir site are hiking, nature walks, pleasure walks, and horseback riding.

The recreation-use season will be extended into the fall through big game and water fowl hunting. Both of these activities are somewhat limited now, but will be increased through fish and game management efforts.

Several sites along the lake shore are most conducive to the establishment of summer cabins for leasing to non-Indian residents. Also considered are summer cabin rentals in the same vicinity.

Boat docks, moorings, rentals, dry dock system, boat repair shop, supply and bait shop, cafe and bar, and 7-11 type grocery store are commercial businesses that will be established as income-producing at this recreation development site.

In order to approach the development of this complex, one prime facility must be recognized as a basic backbone for the entire complex; this is an all-weather blacktop road, leading east from State Highway 32 to the south side of Nutria Reservoir #2 and extending the entire length of the reservoir, making a junction near Nutria #3 Dam with Indian Service Road 5 that continues east to the Nutria Diversion Site. This road will be a scenic drive, as well as basic access to the commercial facilities, summer home sites, camping sites and boat docks. The site for this access road has been determined feasible and should present no unreasonable expenditure.

ESTIMATED USE
Nutria Reservoir #2
1975

Activity	Participation Days Each Person	Potential Participation Days*	Adjusted Use of Potential %	Estimated Participation Days – 1975
Driving for pleasure	20.42	8,746,000	.013	113,700
Walking for pleasure	16.67	7,140,000	.012	85,700
Swimming	7.63	3,268,000	.048	156,900
Sightseeing	7.46	3,195,000	.040	127,800
Picnicking	4.30	1,842,000	.11	202,600
Fishing	3.93	1,683,000	.005	26,326
Nature walks	2.88	1,233,000	.055	67,800
Camping	1.18	505,000	.11	55,600
Horseback riding	1.98	848,000	.03	25,000
Boating (motor)	1.78	762,000	.13	99,110
Hiking	.72	308,000	.11	33,900
Water skiing	.62	265,000	.20	53,100
				1,047,536

*Market area population X days participation for Bernalillo, McKinley and Valencia Counties and St. Johns, Arizona.
Total Population: 428,310.

NUTRIA RESERVOIR #2
TOURISM DEVELOPMENT ENTERPRISE

Estimated Construction Costs

Item	Units	Cost	
Utilities			
Water system	1	$ 99,000	
Sanitary system	1	60,000	
	SUB-TOTAL		$ 159,000
Facilities:			
Cafe and lounge	1	150,000	
Grocery Store	1	50,000	
Boat Marina	1	125,000	
Stable, Tack Room and corrals	1	22,000	
Summer Cabins (rental)	20	60,000	
Camp units	75	150,000	
Picnic units	50	40,000	
Boat Dock	1	3,500	
	SUB-TOTAL		$ 600,500
Roads:			
New construction, grade, base and drainage structures	9 miles	1,150,000	
Resurface and Pave ISR 5	15.5 miles	1,166,000	
	SUB-TOTAL		$2,316,000
Dam:			
Raise dam to enlarge lake	10 feet	850,000	
	SUB-TOTAL		$ 850,000
	GRAND TOTAL		$3,925,500*

*Does not include deferred interest of operating cost advance.

ESTIMATED INCOME
1975

NUTRIA RESERVOIR #2

Activity		**Gross Receipts**	
Swimming		$ 39,225	
Picnicking		57,800	
Fishing		26,326	
Camping		23,850	
Summer Cabin Site Leases		15,000	
Boating (motor)		125,000	
Total Tribal Receipts		$287,201	
Summer cabin rentals		16,200	
Horseback riding		50,000	
Boat Marina		104,080	
Cafe and lounge*		117,600	
Grocery store*		78,000	
	SUB-TOTAL	$365,880	
	TOTAL:	$653,081	
Tribal Receipts		$287,201	
*Sales Tax Income		2,556	
Sub Total			$289,757
Estimated Operating Costs		$155,000	
Debt Service		33,032	$188,032
	NET PROFIT:		$101,725

NUTRIA RESERVOIR #2

Tourism Development Enterprise

STAFFING NEED – 1975

Job	Number Full Time	Annual Salary	Number Seasonal	Salary
Manager	*1	$11,500		
Assistant Manager	1	7,500		
Clerk	1	5,000		
Cook			*1	$ 5,000
Cook's Helper			1	3,400
Waitress			7	28,000
Bartender	*1	8,000		
Maintenance Man	1	6,000		
Stable Attendants	1	7,500	6	18,000
Store Clerks	1	6,000	2	8,000
Game and Fish Officers	1	8,000	4	12,000
Marina Attendants			3	12,000
General Admin. & Maintenance	1	7,500	4	16,000
Total	9	$67,000	28^A	$102,400

(^A Man-years.)

Total employees: 37
Total Indian employees: 34
Total salaries: $169,400
*Non-Indian employees to be replaced by Indians in FY 1975.

PROJECTED EMPLOYMENT

	1971	1972	1973	1974	1975	Total
Indian	.0	6.1	17.6	25.5	30.0	79.2
Non-Indian	.0	2.7	2.7	2.7	.0	8.1
Construction	68.2	48.4	23.4	.0	.0	140.0
Total man-years	68.2	57.2	43.7	28.2	30.0	227.3

WAGES PROJECTED

($ 000)	1971	1972	1973	1974	1975	Total
Indian	.0	32.8	94.7	132.5	169.4	429.4
Non-Indian	.0	27.9	27.9	27.9	.0	83.7
Construction	477.3	339.0	164.1	.0	.0	980.4
Total wages	477.3	399.7	286.7	160.4	169.4	1,493.5

3C. NUTRIA WATERSHED TREATMENT

Funding	($ 000)	1971	1972	1973	1974	1975	Total
BIA		40.5	22.7	26.4	27.7	28.9	146.2

Description: As a portion of, and supportive to the Tourism Enterprise development, it is essential to consider desiltation and erosion control structures on the entire watershed. Coal Mine Canyon drains directly into Nutria #2 Lake and together with the rest of the watershed, is contributing a silt load which will abort the effectiveness of the Nutria Tourism Development project in a short period of time.

The plan of action is to immediately treat Coal Mine Canyon by installing detention dams, diversion structures and gulley plugs. The remaining portion of the Nutria Watershed will be systematically treated. This project will continue beyond FY 1975.

Benefits: This sub project will prolong the life of the lakes and provide clear water for the Tourism Enterprise Developments. It will increase the livestock carrying capacity of the lands so treated and increase forage for wildlife.

3 D. OJO CALIENTE TOURISM DEVELOPMENT

Funding	($ 000)	1971	1972	1973	1974	1975	Total
BIA		.0	15.2	26.0	.0	.0	41.2

Description: Ojo Caliente is a small farming village located in the southwest corner of the Zuni Reservation. The rural village is located near Ojo Caliente Lake which is approximately 25 acres in size and is fed by water from the Sacred Springs.

The high calcium content of the spring water creates extremely favorable trout raising conditions. In addition, because it is spring fed, it is not likely to receive infestations of rough fish. There are a few picnic sites located at the lake but, because of its relatively small size, it is now utilized mainly by the Zunis resulting in limited income to the tribe.

The flow of water to the lake is limited because of ditch seepage and, with transpiration and evaporation losses, in the latter part of summer almost two-thirds of the lake is very shallow and choked by cattails.

The program proposed will be accomplished by (1) chemical treatment of the cattails to eradicate them; (2) the flow of water will be increased by piping it from the springs; and (3) by spring development. This will require 6,500 feet of 12'' pipe and 3,500 feet of 10'' pipe with installed costs of $4.00 and $3.00 a foot respectively.

Benefits: When the ditches are regraded and pipe installed, it is anticipated that flows from the springs will increase because back pressure will be relieved. This lake will be increased in size to approximately 42 acres creating a shallow part in the upper end which will provide an abundance of aquatic organisms for fish food. This project will complement the Zuni-Cibola Historic Park project, of which the Ojo Caliente village is an integral part.

The lake will be readily accessible by road to outside fishermen all year long providing increased income to the Zuni government from sale of permits as well as complementing the economic base an estimated $6,000 per year. Finally, because of the increased flow of water, it is anticipated that a considerable amount can be released for farm irrigation purposes.

3E. GAME AND FISH PLANNING

Funding: None required for FY 1971. When the Soil and Range Inventory is completed the final plans will be made and funding needs determined. This will be developed jointly by the Zuni Pueblo, BIA, Bureau of Sports, Fisheries and Wildlife and the New Mexico State Game and Fish Department. The funding needs will be included in a future updating of this plan.

Description: The projects mentioned previously do not include the Pescado and Tekapo Lakes. The planning on these must, of necessity, be delayed until completion of a Soil and Range Inventory report in the spring of 1970. At that time the erosion control treatment of the entire reservation, as requested by the Zuni Pueblo Council, will be implemented.

There are actually two watersheds which supply water by runoff to Pescado Lake. The smaller watershed produces most of the water. It drains a portion of the west side of the Continental Divide and covers 68 square miles. Drainage from the other watershed is mostly stored in a lake just off the reservation and provides only a limited amount of water to the Zuni reservation.

Pescado Lake, at spillway level, covers 120 acres with a maximum depth of 11 feet. It has been stocked with channel catfish and rainbow trout and provides good fishing but is subject to infestations of green sunfish from off reservation sources. It is proposed that this lake be stocked annually with legal size trout so as to accommodate an estimated potential usage of 2,500 fisherman-days.

Tekapo Lake obtains its water supply by a diversion dike on the Zuni River. At spillway level it covers 127 acres and has a maximum depth of 4 feet. It has never produced any fishing but consideration is being given in future planning to deepening the lake by dredging or excavation.

In the area just west of Tekapo Lake there is excellent dove hunting which can be improved by planting to provide feed. In addition, all lakes on the reservation offer excellent waterfowl hunting which can be improved by similar planting.

Consideration is also being given to additional species including Merriam's turkey, pheasant and quail. These of course, would be dependent upon the Soil and Range Inventory showing the Zuni range has the habitat requirements.

Soil erosion treatment of the entire reservation will increase the carrying capacity of the range. Presently it is estimated there are 3,200 head of deer on the reservation. These would conservatively increase to 4,000 head if more forage is available.

All of these facts will be taken into consideration when final plans are prepared for the remaining watersheds on the reservation.

Benefits: There is game management potential for turkey, pheasant, ducks, geese, doves, quail, rabbits, antelope and deer. This develops income potential from the sale of permits, gas, food, supplies, room rentals, guide fees, tourism and arts and crafts sales.

Enhance Educational Opportunity

The program to enhance educational opportunity is comprised of 22 projects designed to have major impact in educational enrichment, pre-school, special and remedial, counseling and guidance, vocational education and facility expansion.

The projects detailed in this section are planned to start in FY 1971 and to serve 1971 pupils and continue throughout the planning period to FY 1975 when there will be 2600 students in the school system plus the Headstart program.

PROGRAM COSTS BY PROJECTS

Projects	1971	1972	1973	1974	1975	Total
Tri-Semester Plan	147.3	179.4	207.1	248.3	284.0	1066.1
Reduce Teacher-Pupil Ratio	199.2	199.2	215.8	248.6	257.3	1120.1
Zuni Culture and Zuni Language-related Curriculum	17.3	17.0	11.8	8.3	8.3	62.7
Foreign Language	35.0	.0	.0	.0	.0	35.0
Arts and Crafts	8.3	8.3	8.3	8.3	8.3	41.5
Physical Education, Music and Arts Teachers, and Librarian-Media Specialists	144.5	144.7	145.0	189.8	190.1	814.1
Curriculum Study	100.0	.0	.0	.0	.0	100.0
Transportation	82.5	19.6	20.7	22.4	23.4	168.6
Teacher In-service Training	7.5	5.0	2.5	2.5	2.5	20.0
Headstart	132.4	132.4	132.4	132.4	132.4	662.0
Aides in Kindergarten, Pre-first and First Grades	42.0	42.0	42.0	63.0	63.0	252.0
Special Education	58.1	58.1	58.1	58.1	58.1	290.5
Remedial Reading	37.2	45.5	54.3	62.6	70.9	270.5
Guidance Counseling	99.8	110.3	122.1	122.1	135.6	589.9
Attendance Counselors	24.0	17.3	18.2	19.1	28.0	106.6
Vocational Building Trades	10.1	10.1	10.1	10.1	10.1	50.5
Vocational Agriculture	50.7	13.1	24.6	21.0	4.1	113.5
Home Economics	.0	.0	.0	.0	.0	.0
Business Education	27.9	27.9	27.9	27.9	27.9	139.5
General Basic Electricity	9.8	9.8	9.8	9.8	9.8	49.0
Vocational Auto Mechanics	11.3	11.3	11.3	11.3	11.3	56.5
School Building Needs	4165.0	.0	1900.0	.0	.0	6065.0
Administrative Overhead	12.4	10.5	11.2	12.7	13.3	60.1
Total	5422.3	1061.5	3033.2	1278.3	1338.4	12133.7

Income and employment opportunities generated by these projects are shown in the INCREASE INDIVIDUAL INCOME section.

1. TRI-SEMESTER PLAN

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	147.3	179.4	207.1	248.3	284.0	1066.1

39/40

Description: At present, the Zuni Public Schools operate on a normal 180 day schedule, from approximately September 1 through May 31. In the three-month vacation period, the buildings are idle, and the children are busy unlearning as much as possible. The Thorndike learning and forgetting curve shows that a student retains most of what he has learned over a 30-day period during the summer months. During the second month, however, the student begins forgetting what he has learned the previous year and during the third month the forgetting rate increases appreciably. After a normal summer vacation, the school must spend approximately six weeks reviewing last year's work to bring the student up to the level he obtained the previous year. The problem is particularly acute for Zuni children who speak mostly in Zuni while not in school.

In addition to reducing each period of time the student is away from school, a tri-semester plan would offer the following advantages:

1. Because approximately ¼ of the student body would not be in school at any given time, the buildings would not have to be so large.
2. The class size could be kept at a desirable level of 20 students to a classroom.
3. More class offerings would be available to the students through sequence of material.
4. The student would have the opportunity to take more classes if he so desired, such as remedial classes to keep the student at his own peer level.
5. Individual prescribed instruction could be easily adapted in the curriculum to fit the individual student.
6. First grade students could enter school on their sixth birthday.
7. The students on the Zuni Reservation marry young and start having their children, which interrupts their education. The tri-semester plan would allow these students to reenter classes any time of the year so that they would be able to complete their education.
8. High school students would not have to return for a full year to pick up one credit to graduate.

The proposed tri-semester plan will divide the student body into four equal groups with school attendance as follows:

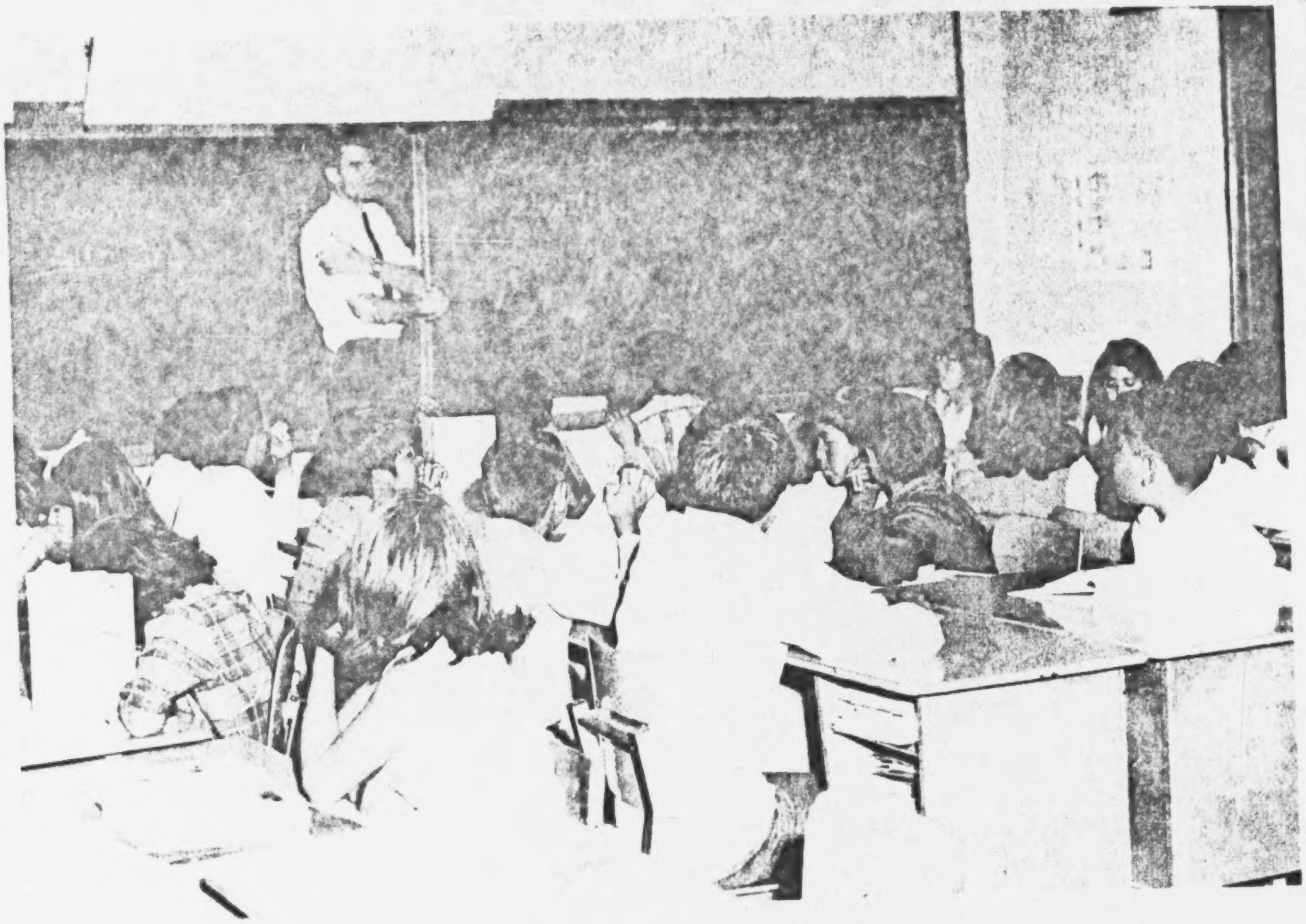
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Group A	XXX	XXX	XXX		XXX	XXX	XXX		XXX	XXX	XXX	
Group B		XXX	XXX	XXX		XXX	XXX	XXX		XXX	XXX	XXX
Group C	XXX		XXX	XXX	XXX		XXX	XXX	XXX		XXX	XXX
Group D	XXX	XXX		XXX	XXX	XXX		XXX	XXX	XXX		XXX

This plan will increase costs by 20% per year.

2. REDUCE TEACHER-PUPIL RATIO

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	199.2	199.2	215.8	248.6	257.3	1120.1

Description: Because of the unique cultural background and the physical isolation of the Reservation, the average Indian child faces school with many handicaps not common to other U.S. citizens. In many cases, his home environment is not conducive to study. English is only a second language



to Indians and often is not even spoken in the home. Abnormally high crowded conditions means that adequate space in which to study is not readily available and good lighting is usually lacking. Parental help and encouragement is also often not forthcoming.

To overcome these problems and assist advancement at a normal pace, the Indian child needs more than the customary individual attention from his teachers. To accomplish this, the classroom load must be reduced to a ratio of 20 to 1 in classrooms from grades 1 through 12.

3. ZUNI CULTURE AND LANGUAGE RELATED CURRICULUM

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	17.3	17.0	11.8	8.3	8.3	62.7

Description: It is desirable to include some direct and indirect teaching of cultural values and ethical viewpoints to students in any academic situation. The best learning situation is that which incorporates the short-range views of the individual and collective sub-cultural group functioning in his cultural environment. The Zuni child presently experiences two cultural perspectives to which he is expected to adhere to some extent, thereby yielding a feeling of frustration and alienation from both.

A substantial need exists to unify, in thought and exposure, the perspectives which a Zuni child endures. To meet this need, Zuni-oriented activities will be included in the classroom and extracurricular programs. Heritage will be taught through Zuni legends and greater appreciation will be derived for the ethics and culture through the Zuni language.

Zuni legend and language will be incorporated by the use of drama as performing art, Zuni readers in the primary levels, and legendary lore and stories in upper-level literature texts. Community concepts of Zuni Indians will also be taught. An example of this, already planned, is the rearrangement of seventh grade social studies curriculum to include an Indian functioning in his village as an economic unit. Later this will be expanded to a broader approach at some higher level of study.

A large number of legendary materials will be collected for use by the students and as resources for the teachers. An elementary level Zuni language text will be developed for the primary students and a Zuni language course will be given for high school students.

4. FOREIGN LANGUAGE

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	35.0	0	0	0	0	35.0

Description: To meet today's curriculum standards in terms of college preparation, it is essential to have foreign language study, other than English or Zuni, on the high school level. This program will provide for the inclusion of a classical romance language, preferably Latin, as the students coming from Zuni into English need additional preparation and instruction on the origin of English words and their meanings. Also included will be a "Latin and Greek Derivatives Course" as taught in major high schools in the nation. Junior and senior students will benefit from these courses whether they go on to advanced education or not.

In addition, Spanish will be made available because some Zuni words are derived from Spanish. Zuni is located in the southwestern area where there are many Spanish speaking people. The students, when polled, preferred Spanish as second choice for foreign language study (Zuni being the first choice).

Language laboratory facilities will be included and will be in maximum use at all times as they will be shared by Spanish, Derivatives and Zuni language classes, as well as by the Zuni literature classes. The laboratory will have 40 partitioned booths, with master controls capable of channeling as many as eight separate tracts of programming to separate booths at the same time. Individual student units will have facilities for programming, selecting, recording, and playback.

5. ARTS AND CRAFTS

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	8.3	8.3	8.3	8.3	8.3	41.5

Description: Zuni High School has developed an outstanding program in art, but it does not offer anything in crafts. The natural artistic ability of the Zuni people dictates that arts and crafts be taught as a vocational preparatory course. Institution of this will also contribute toward preservation of this part of the Zuni culture.

Lapidary and silversmithing, traditional occupations of the Zuni people, will be added to the curriculum, along with the art of making pottery and bead-work. The Zuni Craftsmen Cooperative will serve as an outlet for sale of many items which will supplement the income of these students. In addition to showing at the Zuni Fair, a public showing and sale will be held each year at the annual Shalako ceremony and again in the spring.

The additional classroom space, equipment and supplies are included in the secondary school building proposal. An instructor who is qualified in the crafts field will be hired.

6. ELEMENTARY PHYSICAL EDUCATION, MUSIC AND ART TEACHERS AND LIBRARIAN-MEDIA SPECIALISTS

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	144.5	144.7	145.0	189.8	190.1	814.1

Description: A teacher cannot be all things to all children. Because of the lack of funds for special teachers, physical education, the fine arts, and library services have been the most neglected areas of the elementary school curriculum. The results have been an erratic, inconsistent application of these programs in the elementary schools.

There has been a lack of facilities for physical and recreational activities in the homes and the village as a whole. The elementary schools where controlled and organized programs can be instituted seem to be the logical place for a comprehensive, continuous, varied curriculum of Physical Education. These programs will be administered by qualified personnel who will initiate and carry out a program to improve health and the social and physical skills of these younger children.

Many Zuni children have an innate, native love and appreciation for art and music. This love and appreciation will be nurtured and expanded along multi-cultural, multi-media lines in order that the very talented can be discovered and encouraged, while the less talented will develop an appreciation for the art and music of their own and different cultures.

The New Mexico Educational Standards require each school to have an adequately equipped and staffed library. However, the Zuni Elementary schools do not have librarians to assist students and teachers in the utilization and coordination of these facilities. In addition, the Zuni children need many audio and visual materials to compensate for their limited experiences. There is a definite need for Librarian-Media specialists in the Zuni Elementary schools.

7. CURRICULUM STUDY

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	100.0	0	0	0	0	100.0

Description: A professional, objective study must be made of the curriculum needs at all grade levels of the Zuni schools in order to assure that the education of Zuni children will progress to the highest possible level. Since education by a public school system began in 1958, a great deal of thought and research by the teachers and other interested parties, has gone into curriculum designing for Zuni students. It is difficult, however, for someone living and teaching at the Reservation to have a completely objective view of the problems. Zuni children are unique. Their culture is unique. Because of this, their education poses problems which are unique to the situation on the Zuni Reservation.

A bi-lingual situation exists at Zuni whereby mostly Zuni is spoken at home and English at school. Where courses are conducted in English and are designed for teaching to non-Indian children, comprehension in school is difficult. The dropout rate in high school is a major problem. In FY 1968, Zuni Secondary Schools had the highest dropout rate in McKinley County. Suicide among teenagers and young adults, which rarely occurred in the past, has now become a major concern and problem. Marriage of many teenagers results in having fathers and mothers returning to school because they wish to complete their education. The present curriculum does not meet the needs or hold the interest of the average Zuni student. A comprehensive study of the curriculum needs of Zuni children from pre-school through high school will be made by an independent, professional group to establish a new curriculum and assist in implementing it throughout Zuni schools.

8. TRANSPORTATION FOR ENRICHMENT ACTIVITIES

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	82.5	19.6	20.7	22.4	23.4	168.6

Description: The need for additional funds for transportation of Zuni children attending public schools becomes self-evident when the present situation is analyzed. The Pueblo lacks many of the facilities which provide basic learning experiences for children in communities with similar population. Zuni is 40 miles from the nearest railroad, restaurant, supermarket, theater, bus station, hotel, public park, or newspaper office. It is 150 miles to the nearest zoo, dairy, or a building that has an escalator or elevator. These facilities, usually taken for granted, play an integral part in the development of elementary school children.

There has been great concern on the part of persons involved in education in Zuni with the number of students who have completed high school and have left the reservation for advanced training either in the academic or vocational fields, only to return, not from the lack of finances or satisfactory grade average, but because they are unable to cope with an environment which they are not sufficiently prepared to meet. The Zuni students must be given every opportunity possible to make early and frequent contact with the environment that exists off the reservation. Well regulated field trips will provide invaluable learning experiences and help the students to acquire some of the self-confidence they will need if they choose to leave the reservation when they have completed their high school education.

In a survey of the Junior Class at Zuni Secondary School made in March 1969, the 65 students were asked what places in New Mexico they had visited. Seven of the 65 had been to Albuquerque, 150 miles away; two students had been to Carlsbad and Roswell, and three students had been to Aztec. In almost every case, the students who had traveled beyond Gallup, 40 miles away, were on a school function, such as band, student council, athletics, or FFA.

At the present time, because of the financial problems confronting public school education in New Mexico, the allotment for activity travel in Gallup-McKinley County Schools is entirely insufficient. For past years, the allotment has been approximately one dollar ($1.00) per child. The cost of using a bus for activity travel is 45¢ per mile. For a class of 30 students this is not enough to make a trip to Gallup and back, a distance of 80 miles.

Two passenger buses will be purchased in FY 1971 to be used for activity travel for Zuni children. These buses will be maintained by the Vocational Auto-Mechanics Department at Zuni Secondary School. A travel allotment of $10.00 per child, per year, will be made to allow Zuni students the opportunity of off-reservation experiences they so vitally need.

9. TEACHER IN-SERVICE TRAINING

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	7.5	5.0	2.5	2.5	2.5	20.0

Description: Although many teachers are educated each year by the nation's higher institutes of education, there is a lack of specialized training for teachers to teach an Indian child. Because of this lack of specialized training, a new teacher on the Reservation, even though he may be experienced, is faced with new problems, unique to the Indian Reservation. First, there is the problem of language. Most students are fluent in and tend to revert to a language the teacher does not understand. Secondly, the teacher must try to cope with and understand a culture that is new and alien to him. Many teachers soon become frustrated and discouraged and move on to other schools creating a never ending turnover in Reservation teachers.

An in-service training program will be offered to the teachers on the problems that an Indian child faces and show how to help him overcome these problems. In this way, the school will do a better job and hold a constant teaching staff.

This will be implemented by locating a college which has a fine education department, as well as adequate sociology and anthropology departments. Professional people from the college will come to Zuni once a month and work with the teachers. This training will be required of all the teachers the first year, and all new teachers thereafter.

10. HEADSTART

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	132.4	132.4	132.4	132.4	132.4	662.0

Description: This project was started through the OEO in April 1965. Since that time, an average of 125 children, ages 3 to 5, have attended each nine month session.

The children attend only half a day, but are all fed a nourishing, well-balanced lunch, often not available in their homes. In addition they are given a snack halfway through each session.

The objectives of the program are as follows:

1. To improve the child's mental processes by helping him perfect his ability to think and speak clearly.
2. To help the child expand socially and emotionally by adding self confidence, self expression and curiosity.
3. To give the child a wide variety of experiences in which they can succeed.
4. To help the child speak easily and with skill.
5. To help develop his body with gross and fine motor control.
6. To develop the child and the child with his family.
7. To help the child and his family achieve greater dignity.

Staffing consists of a Director, four teachers, ten teacher aides, two cooks and a janitor. During the three-month vacation period the janitor and cooks do not work. The remainder of the staff attend career development training sessions conducted by ICAP and make plans for the coming year. The curriculum provides instruction in basic English, toilet training, table manners, dental hygiene and establishing peer relationships. The curriculum is further enriched by the addition of art, music, and field trips.

This program will be continued because it has been established that children who have gone through Headstart have improved English comprehension and reasoning abilities. It is estimated that students with adequate English comprehension and reasoning ability will save the elementary school staff six months of extra work. In addition, they have increased confidence in their own social, mental and physical abilities.

11. AIDES IN KINDERGARTEN, PRE-FIRST AND FIRST GRADES

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	42.0	42.0	42.0	63.0	63.0	252.0

Description: Kindergarten in Zuni schools is aimed primarily at building vocabulary skills and teaching English as a second language to 5-year-old children who come to school with little or no facility in English language. The pre-first grade is for 6-year-olds who have not gained enough skills in language in kindergarten to be successful in the first grade program. The first grade continues an intensive language program in addition to the regular academic subjects.

Because of the size of most classes, the teachers must group children, resulting in loss of teaching time with one group while working with another. This project will provide an aide to work with one group while the teacher is working with another, thus speeding up the process of learning in the early grades. The aides will be Zunis who are high school graduates. They will assist the teacher and pupils in communicating new ideas and concepts, and bridge the language and cultural gap.

12. SPECIAL EDUCATION

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	58.1	58.1	58.1	58.1	58.1	290.5

Description: There are no special education classes in the Zuni school system and because of the heavy pupil load, no special attention can be given to children needing this type of education. A child with learning disabilities is usually retained one or two years, then socially promoted until he finally drops out. Likewise, for the physically handicapped child, there are no special provisions. If he attends school at all, he must adjust to the regular program. If the handicap is severe, the child stays home. There are presently 54 children at Zuni who have either physical or learning handicaps and need this program.

These children present a serious problem in the regular classroom. Socially and academically they do not, and cannot, conform, so they receive little benefit from schooling. As a result, they are not prepared to live meaningful and productive lives when they leave school.

Qualified teachers in this field will be obtained and provided with specially constructed facilities with all necessary equipment to conduct the program. An adequate testing program will be carried out with a curriculum that is developed to meet the situation at Zuni. The minimum objective is to prepare these children to support themselves in the future.

13. REMEDIAL READING

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	37.2	45.5	54.3	62.6	70.9	270.5

Description: The reading program presently in operation is limited in scope so that only 40-50 most needy students benefit each year. The following table indicates the results of the test given in May 1968.

The test results indicate the need for an expanded program of remedial reading in order to improve the reading ability and comprehension of the students. Because of high teacher-pupil ratio, little time can be spent in the upper classes for direct teaching of reading skills. This program will include in-service training for teachers in this area, such as extra training in reading for English teachers and participation in national and regional conferences in Reading and English. Special facilities and equipment are reflected in the building needs program.

The instructional approach is based on an assessment of individual needs and individualized teaching plans for clinical remedial reading, with classes of from 5 to 20 students. Emphasis on teaching English as a second language will be encompassed in the curriculum.

CALIFORNIA ACHIEVEMENT TEST RESULTS IN READING, MAY 1968

ZUNI SECONDARY SCHOOL

Grade	No. of Students	Mean G.P.* Reading	Mean Percentile	No. of Students Reading 2 years or more below G.L.**	No. of Students Reading 1 year or more below G. L.**
7	65	7.5	44.6	3	17
8	42	7.8	32.6	10	18
9	66	7.8	19.2	17	49
10	60	9.5	33.4	17	36
11	58	9.5	22.8	25	43
12	45	9.2	10.8	28	42

* Grade Placement

** Grade Level

14. GUIDANCE COUNSELING

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	99.8	110.3	122.1	122.1	135.6	589.9

Description: Guidance is an educational service designed to help students make more effective use of the total instructional and developmental program. It adds no new objectives to the educational program, but endeavors to help the student realize his potentialities by making use of the school's offerings.

A need exists to encourage students to stay in school, to complete their schooling, and to achieve satisfaction during their school attendance. A coordinated and expanded guidance and counselor service is one avenue of approach to the many existing problems.

In view of the size of the student body, group guidance will be employed as much as possible at all levels. Individual counseling will be made available so that each student may have an opportunity to discuss his individual problem as the need arises. Since Zuni culture is family-oriented, family counseling will be employed wherever it is necessary to enable the student to function adequately in the educational environment.

The testing program needs considerable improvement. Individual and non-language testing will be employed, since most present group tests have built-in cultural bias which render them inadequate tools of measurement for an Indian student in this stiuation. A trained psychometrist is needed in this area.

A follow-up program will be adopted. This will encompass the work of the visiting teacher and/or a school social worker to help reduce the high absenteeism and tardiness prevalent in the system at present. Follow-up work will be done with high school dropouts and high school graduates. A follow-up study of graduates will include reports of their additional schooling and/or employment. This type of information will be helpful in future curriculum offerings developed to meet vocational and educational needs.

To implement an adequate guidance program, qualified counselors certified in their fields will be employed. A coordinator for the all-school program will insure continuity through all grades. In-service training for all teachers is basic to the program as certain guidance functions are performed as an integral part of classroom instruction. The psychometrist will assume responsibility for testing and test-development.

The recommended ratio of counselor to student by the American Personnel and Guidance Association is one counselor for each 200 to 300 students. In the present situation where there are only 1½ counselors in the secondary school and none in the elementary school there has been little or no counseling to date, this program proposes a minimum of one for each 200 students. Also needed are supporting clerical staff for maintaining cumulative records, scheduling, correspondence, typing and compiling statistics and reports, in order to free the counselor for actual work with students rather than with papers.

15. ATTENDANCE COUNSELORS

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	24.0	17.3	18.2	19.1	28.0	106.6

Description: The present prevalence of absenteeism, tardiness, and dropouts makes it necessary to have attendance counselors at a ratio of 1 counselor to each 500 students.

Many children live with foster parents who exert little or no disciplinary action on the children. Attendance counselors will work with parents, foster parents, and the children to encourage regular school attendance. They will advise parents on providing a time and place for home study and encourage them to show an interest in the school work of their children.

It is desirable that the attendance counselors be Zunis who have experienced the advantages of education through better jobs and steady employment. They will be conversant with both non-Indian and Zuni cultures so they can effectively act as liaison between the schools and the parents to provide a mutual understanding of the likenesses and differences that cause conflict of interests. They will better be able to see and analyze the problems of the schools and the parents, and advise both on courses of action for mutual benefit.

The absentee rate of the elementary level averages 6 per cent. This means that about 76 children are absent each day from the 4 elementary schools. About one-third of these are unexcusable absences. This results in approximately 25 children absent each day with no legitimate excuse.

Three counselors will be employed and three vehicles purchased in FY 1971. With the projected enrollment increase, one additional counselor and vehicle will be required in FY 1975.

16. VOCATIONAL BUILDING TRADES

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	10.1	10.1	10.1	10.1	10.1	50.5

Description: The large amount of home and other building construction anticipated during the five year planning period will give the impetus to make Zuni Pueblo a viable, growing community. Building needs will continue here at Zuni, as well as off the reservation. Many jobs will become available to utilize the training students are presently getting in Secondary School Vocational Building Trades. Further post high school and supplementary on-the-job training will enable students who desire to follow these vocations, to earn a good living in the future.

This program is presently hampered by inadequate equipment, supplies and classroom space. The new Secondary School building will include the necessary space and equipment.

17. VOCATIONAL AGRICULTURE

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	50.7	13.1	24.6	21.0	4.1	113.5

Description: Zuni High School introduced Vocational Agriculture into its curriculum in 1968. They also organized a Future Farmers of America Chapter as an inter-curricular part of the program. This year, the FFA Chapter leased 111.3 acres of land for a demonstration farm from the Nutria and Zuni Cattle Associations for 10 years. By agreement with the associations, the first three years' rent will consist of improvements to the land. The Vocational Agriculture Program, designed to train students in all phases of agriculture, will be expanded. A part-time manager will be hired to run the demonstration farm. Livestock, seeds, fertilizer and equipment will be purchased.

Farming procedures will be taught, using both irrigated and dry land methods. By using the demonstration farm, the students will learn how to farm their family land with crops that can be raised and marketed in this area. They will be taught the use of commercial fertilizer, use of certified seed for increased production, proper irrigation methods, and to become proficient in operating and maintaining farm equipment.

The livestock improvement program on the demonstration farm will emphasize the raising of quality livestock. To train the students in proper methods of livestock production, each will be given a cow, sheep or hog to feed and care for. It will be his responsibility to keep records of what it costs to raise the animal. When the animal is ready for market, the student will sell it, figure the profit made, and repay the Chapter the amount advanced. Any net profit will belong to the student. Students will also receive training in poultry and dairy production.

The students will be taken on tours of agricultural businesses, farm and livestock operations, and livestock and produce shows. Participation in shows and contests will be encouraged.

In FY 1973, a complete slaughtering and processing plant will be started to train students in this line of work.

18. HOME ECONOMICS

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	0	0	0	0	0	0

Description: Although many students are anxious to enroll in the Home Economics class, the number of students able to participate is greatly limited. Only 11 sewing machines and 3 cooking stations are presently available for student use. Arrangements will be made for students to take on-the-job training in the Day Care Center discussed in another part of this document. This will give the students actual experience in the care, handling of infants. The new secondary school building contemplates the provision of an adequate Home Economics lab facility.

19. BUSINESS EDUCATION

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	27.9	27.9	27.9	27.9	27.9	139.5

Description: The contemplated economic growth in the Zuni Pueblo, as well as elsewhere, has caused more applications to be submitted for these courses than present facilities can accomodate. This project will expand the present facilities so that adequate instruction can be given in this field. The students will be given training in the use of modern equipment and supplies. Courses in advertising, marketing, salesmanship and retailing will be added. Business English, spelling and oral expression, will also be stressed. An on-the-job training plan will be implemented wherein the students can actually work in an office environment for one or two hours a day to get practical experience. Within the school, students will be given extra curricular assignments, such as handling cash, designing the yearbook, and other meaningful learning experiences. Classroom space, materials and supplies will be included in the new secondary school building.

20. GENERAL BASIC ELECTRICITY

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	9.8	9.8	9.8	9.8	9.8	49.0

Description: At the present time, there are two electronics plants on the reservation. These industries have their own training program but indicate that it would be desirable if new employees had a basic knowledge of electricity. This course will provide that basic knowledge and give the students an opportunity to determine if this vocation is compatible with their desires for future employment. Classroom space and necessary equipment and supplies are included in the secondary school building proposal. It will be necessary to add an instructor to the present staff for this course.

21. VOCATIONAL AUTO MECHANICS

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	11.3	11.3	11.3	11.3	11.3	56.5

Description: This course was added to the curriculum of Zuni High School for the first time in FY 1969. It has been accepted very enthusiastically by the Zuni students. Shop space is inadequate to accommodate all who desire to take the course. In addition, the present facilities are not adequate to carry out a comprehensive vocational program in auto mechanics.

The program will be expanded in order to provide basic job entry skills. The necessary shop space, adequate equipment and supplies are included in the new secondary school building. It will be necessary to add one more qualified instructor.

22. SCHOOL BUILDING NEEDS

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	4165.0	0	1900.0	0	0	6065.0

Description: Much has been said in recent years about Indian education but little has been done about school building needs for Indian children. The Zuni Reservation is an example of the result of lack of money for buildings. The public schools on the Zuni Reservation are under the Gallup-McKinley School System, and the school buildings were built with Public Law 815 funds. At the present time, the government has not allotted enough funds to keep up with the growing building needs.

The public schools now have two elementary and one secondary school located on the reservation. The schools are overcrowded, and new additions and buildings are needed. Zuni Elementary has a capacity of 560 elementary students, Towa Yallane Elementary School was built for 300 students and Zuni Secondary School now has a capacity of 600 students. This makes a total capacity of 1460 students, with 1506 students in attendance this year. Three years ago, the Gallup-McKinley County School System made an application for Public Law 815 funds to build a junior high school for 300 students. None of the money has been appropriated at this date, and with more delay, the building will not be adequate to house the number of students now in these grades.

Under PL 815, the law does not allow overbuilding for future growth. Temporary buildings are now in use at Towa Yallane Elementary, which is only 1½ years old. An application made for funds for two additional classrooms has not been implemented.

With the demand for classroom space, the schools are using temporary buildings to ease the load. Although these are placed near the main building, the children are exposed to the cold and mud when going from building to building. Such conditions do not make education attractive to a child.

Under Public Law 815 funding, no money is available for landscaping, paving or provision of play areas, nor is there money to fence the schools or to provide athletic fields with seating and grass tracks. It is essential in FY 1971 to add 13 new classrooms to Towa Yallane School, with additions to the library and additional restroom facilities. Teacher housing will also be necessary. This will bring the capacity of Towa Yallane to 500 students.

In FY 1973, a new elementary school is needed with a capacity for 500 students. The Zuni Pueblo will either purchase and rent the necessary land or assist the school in negotiating a satisfactory lease with the land owner of the site chosen.

Under present conditions, it appears advisable to use the present Secondary School as a Junior High School and to build a new High School with a capacity for 600 students, including necessary space for vocational courses. This is needed in FY 1971.

All school buildings will have the necessary equipment for teaching and teacher housing. It is also essential to include sufficient money for paving, landscaping, fencing, playgrounds, and athletic fields.

23. ADMINISTRATIVE EXPENSE

Funding by Agency	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
HEW	12.4	10.5	11.2	12.7	13.3	60.1

Description: This is to provide the necessary, additional administrative overhead expense to conduct this exemplary program. It is calculated at 10 per cent of the cost, excluding building construction.

Improve Living Conditions

The 14 projects detailed in this section were selected primarily to improve living conditions on the reservation by providing adequate housing, a sanitary environment, paved streets, utilities, commercial, public and recreation facilities and other amenities usually taken for granted.

Funding by Project ($ 000)	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
1. Pueblo Government Management	329.9	350.1	365.2	374.4	394.8	1814.4
2. Low Income Housing	2560.0	2360.0	2370.0	1670.0	305.0	9265.0
3. Medium and High Income Housing	690.0	690.0	690.0	690.0	690.0	3450.0
4. Pueblo Utility Development	1645.5	1.6	1.6	1.6	1.6	1651.9
5. Streets and Storm Drainage	1700.0	900.0	900.0	900.0	900.0	5300.0
6. Flood Control for Zuni Community	111.3	336.4	74.3	72.3	68.1	662.4
7. Ojo Caliente Village Flood Control	79.7	315.6	36.1	22.2	22.2	475.8
8. Parks and Pueblo Beautification	60.0	60.0	40.0	30.0	20.0	210.0
9. New Mexico Highway #53 Bypass	753.0	16.0	16.0	16.0	16.0	817.0
10. Jail and Court Facilities	311.0	.0	.0	.0	.0	311.0
11. Zuni Health Services	308.4	58.4	2891.7	74.7	74.7	3407.9
12. Day Care Center for Children	89.0	29.0	93.1	33.1	97.3	341.5
13. Facility for Senior and Disabled Residents	123.3	27.3	27.3	27.3	127.3	332.5
14. Community Recreation	15.0	12.0	12.0	12.0	12.0	63.0
TOTALS	8776.1	5156.4	7517.3	3923.6	2729.0	28102.4

Income and employment opportunities generated by these projects are shown in the INCREASE INDIVIDUAL INCOME section.

IMPROVE LIVING CONDITIONS

Summary Table of Funding Sources

	1971	1972	1973	1974	1975	Total
DOT	375.0	.0	.0	.0	.0	375.0
N.M.	378.0	16.0	16.0	16.0	16.0	442.0
HEW	117.0	.0	45.0	.0	120.0	282.0
OEO	202.7	156.2	126.0	89.6	64.6	639.1
BIA	2438.9	1381.2	1350.2	1335.3	1087.3	7592.9
Zuni	121.7	178.1	224.9	268.5	315.9	1109.1
HUD	2879.0	2684.0	2666.0	2007.0	958.0	11194.0
IHS	473.4	208.4	3041.7	174.7	94.7	3992.9
BIA Loan	49.0	10.0	25.0	10.0	50.0	144.0
HUD Loan	1643.9	.0	.0	.0	.0	1643.9
SCS	75.0	500.0	.0	.0	.0	575.0
LEAA	22.5	22.5	22.5	22.5	22.5	112.5
TOTALS	8776.1	5156.4	7517.3	3923.6	2729.0	28102.4

1. PUEBLO GOVERNMENT MANAGEMENT

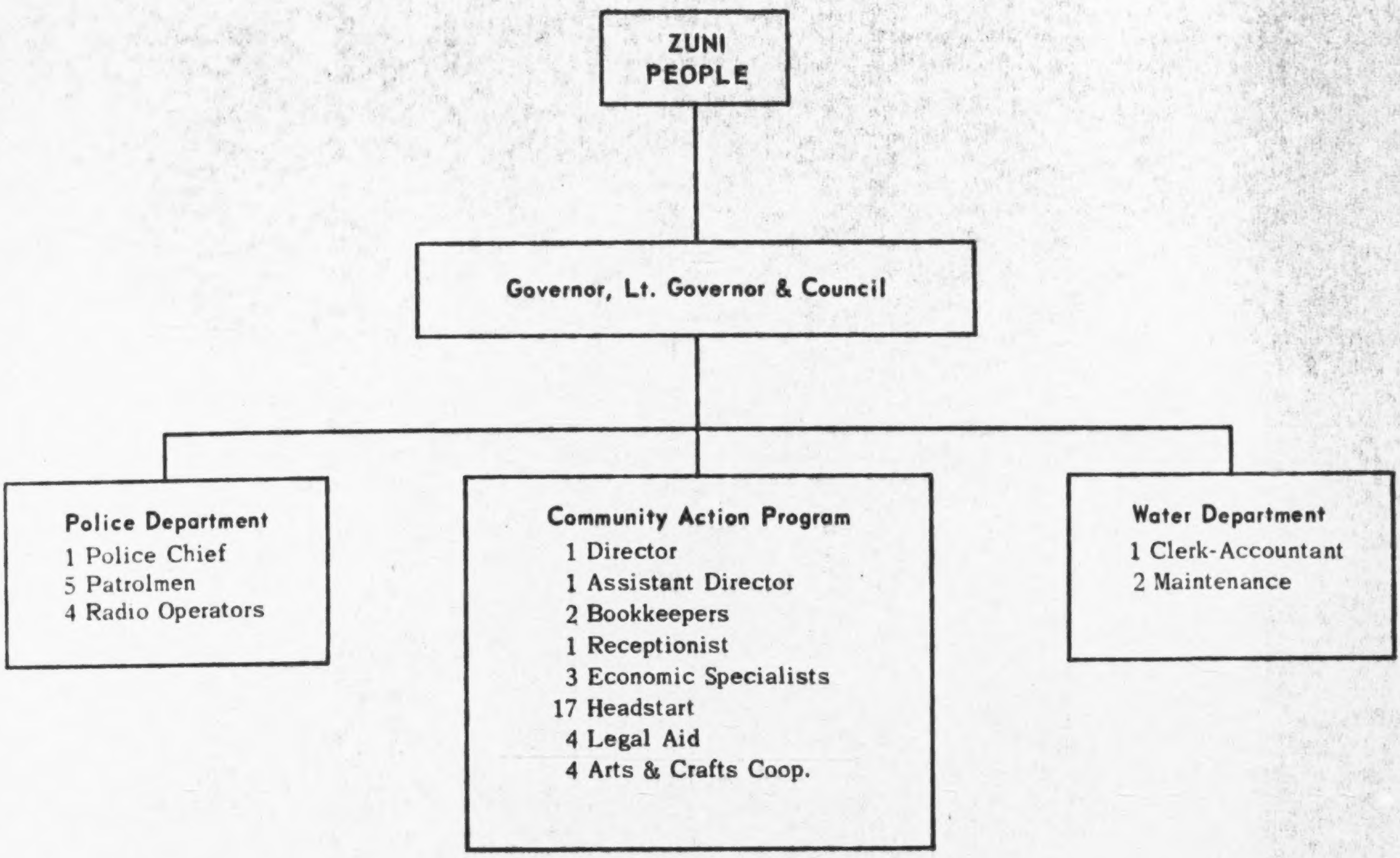
Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
OEO	146.4	99.9	65.6	29.2	0	341.1
LEAA	22.5	22.5	22.5	22.5	22.5	112.5
BIA	61.9	69.2	69.8	70.8	72.0	343.7
Total Federal	230.8	191.6	157.9	122.5	94.5	797.3
Zuni Pueblo	99.1	158.5	207.3	251.9	300.3	1017.1
TOTAL DEVELOPMENT COST	329.9	350.1	365.2	374.4	394.8	1814.4

Funding rationale:

- BIA to continue and increase police and court contract.
- FY 74 anticipates replacing 2 department heads from the trainee program.
- FY 75 anticipates replacing 2 department heads from the trainee program.

Description:

The Pueblo government currently consists of a Council of eight members, including a Governor and Lieutenant Governor, elected by secret ballot for two-year terms. The Governor is the administrator, as well as the political chief executive. All government programs are managed by the Council, with the Governor serving as leader. To assist him, the Council employs the staff shown in the organizational chart on the following page.



ZUNI PEOPLE

Governor, Lt. Governor & Council

Police Department
- 1 Police Chief
- 5 Patrolmen
- 4 Radio Operators

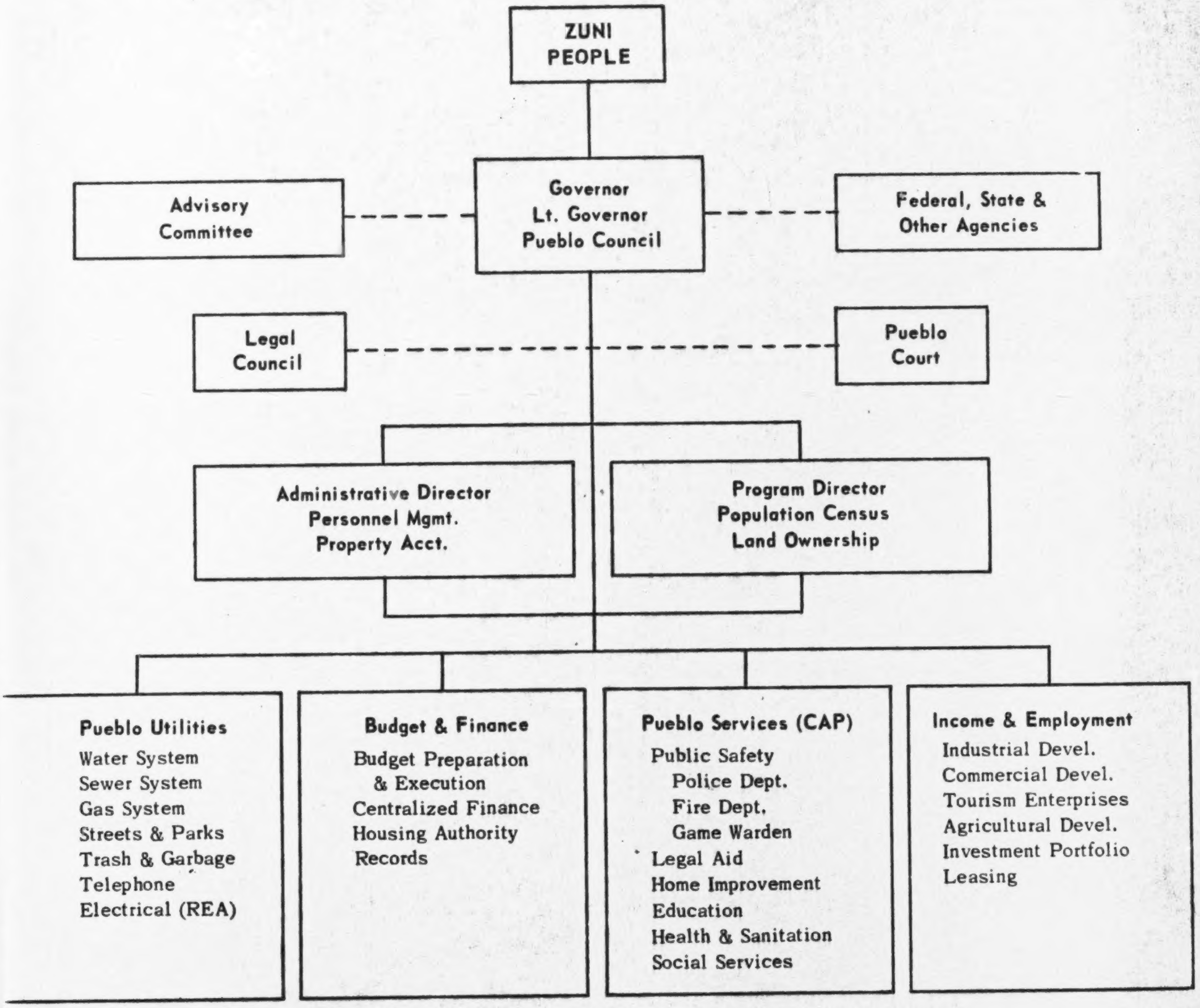
Community Action Program
- 1 Director
- 1 Assistant Director
- 2 Bookkeepers
- 1 Receptionist
- 3 Economic Specialists
- 17 Headstart
- 4 Legal Aid
- 4 Arts & Crafts Coop.

Water Department
- 1 Clerk-Accountant
- 2 Maintenance

The Pueblo Government organization met the requirements of the Indian Reorganization Act of 1934, and provided a formal leadership to deal with the non-reservation public and the U. S. Government. Its size and operation have been limited by insufficient Pueblo funds to the point that (1) staff were not available to work with and obtain assistance from federal programs, and (2) inadequate funds prohibited the local matching fund requirement to participate in federal programs. (The Pueblo is too poor to fully participate in the War on Poverty.)

The massive impact of development programs included in this Comprehensive Development Plan requires a substantial increase in the size of the Pueblo government organization. Future management of Pueblo ordinances and other government functions will require a well organized, trained, and competent staff.

The following organization structure has been designed as the minimum required to implement this comprehensive plan and manage the on-going Pueblo government affairs in future years:


ZUNI PEOPLE
Governor
Lt. Governor
Pueblo Council
Advisory Committee
Federal, State & Other Agencies
Legal Council
Pueblo Court
Administrative Director
Personnel Mgmt.
Property Acct.
Program Director
Population Census
Land Ownership
Pueblo Utilities
Water System
Sewer System
Gas System
Streets & Parks
Trash & Garbage
Telephone
Electrical (REA)
Budget & Finance
Budget Preparation & Execution
Centralized Finance
Housing Authority
Records
Pueblo Services (CAP)
Public Safety
Police Dept.
Fire Dept.
Game Warden
Legal Aid
Home Improvement
Education
Health & Sanitation
Social Services
Income & Employment
Industrial Devel.
Commercial Devel.
Tourism Enterprises
Agricultural Devel.
Investment Portfolio
Leasing

The operation of the government structure shown on the preceding page is explained by the following statements:

FUNCTIONAL STATEMENT

Zuni People – Pueblo members, numbering about 5,000, depend almost totally on the Pueblo government to obtain services, protection of life and property, individual rights, etc., that are provided non-Indians by State, county and city governments.

Governor, Lt. Governor and Council – This body has total responsibility and authority for Pueblo government, except for the trust responsibility of the Federal Government administered through the Bureau of Indian Affairs. The council uses an advisory committee when considering reservation land use matters. All official contact with the Pueblo by Federal, State and other agencies are made through this body. Retention of legal Counsel is on a continuing basis. The proposed constitution provides for appointment of Judges to the Pueblo Court for 6 year terms.

Administration – Program Plans and Evaluation – The Administrative Director and Program Director are responsible directly to the Governor. They supervise the department heads in separate functional areas of responsibility. The **Administrative Director** is responsible for operations of approved, existing program activities included in the current year budget and required daily functions of the government. Functions in his immediate office are personnel management and property accountibility. The **Program Director** is responsible for the planning of future year programs; preparation of annual budgets; preparation of codes and ordinances; and preparation, modification and updating of the Pueblo physical development plan. Periodic evaluation of operating programs are also his responsibility. Additional functions in his immediate office are population census and land ownership records.

Pueblo Utilities – The utilities engineer, heading this department, is responsible to the Administrative Director and Program Director, as defined under Administration – Program Plans and Evaluation. This department head plans, directs and supervises the Pueblo water, sewer, trash and garbage, electrical and telephone systems. The operation of these systems and services will be done by means of in-house operation, contracts with individuals and companies, or agreements with public and Federal agencies.

Budget and Finance – The Budget and Finance head is responsible to the Administrative Director and to the Program Director as defined under Administration – Program Plans and Evaluation. The department head plans, directs, and supervises the functions of his department.

A centralized finance system will be maintained, including each department and major office of the government, in accordance with the approved annual budget and continuing financial obligation of the government. Preparation and administration of all contracts entered into by the Pueblo will be the responsibility of this department. Legal counsel will be used as needed. Bookkeeping for the Pueblo Housing Authority will be provided until the Authority accumulates sufficient funds to provide its own staff.

Pueblo Services (CAP) – The Department Head is responsible to the Administrative Director and the Program Director, as defined under Administration – Program Plans and Evaluation. The department head plans, directs and supervises the functions of Public Safety (Police, Fire Department and Game Warden), Legal Aid, Home Improvement program, liaison with State and Federal Education, Health and Sanitation, and Social Services programs. The operation of these programs and services will be done by means of in-house operation, contracts with individuals or agreements with private, State and Federal agencies.

Income and Employment – The Department Head is responsible to the Administrative Director and Program Director, as defined under Administration – Program Plans and Evaluation. The department head plans, directs and supervises the functions of Industrial Development, Commercial Development, Tourism Enterprises, Agricultural Development, Investments and Leasing. The operation of these development programs will be done by means of in-house operations, negotiations with private firms, contracts with individuals and management firms or grants and loans from private and Federal agencies.

Benefits – This project will have direct and indirect impact to produce the following benefits to the Zuni people:

a. It will make possible the active participation of the Zuni people, as a local partner, in using Federal assistance programs designed to help them raise their standard of living.

b. The Pueblo government will be able to provide more active and effective leadership in the programs and better enable the people in working to achieve their development goals.

c. The project could well make the difference between successful and unsuccessful implementation of the Comprehensive Development Plan.

2. LOW INCOME HOUSING

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HUD	2145.0	1950.0	1950.0	1300.0	260.0	7605.0
IHS	165.0	150.0	150.0	100.0	20.0	585.0
BIA	250.0	260.0	270.0	270.0	25.0	1075.0
Total Federal	2560.0	2360.0	2370.0	1670.0	305.0	9265.0

Funding Rationale:

The BIA portion of this funding covers the interior finish, as well as repairing existing houses to bring them up to standard. The IHS portion is for necessary plumbing including connection to sewer and water lines. The HUD portion includes the construction costs of homes programmed to be built each year. Streets, curbs and sidewalks are included in Project #5. The amounts shown in FY 1975 are the estimated annual continuing need.

Description:

There is an extreme shortage of adequate, safe, decent, sanitary dwellings in the Pueblo. The Zuni people are a matrilineal society. The women are responsible for the internal functions of the extended family unit. The religious functions are controlled and administered to by the men through their religious groups or Kivas (fraternities).

A family unit develops when the daughter brings her husband into her parents' household. As the family grows to the extent that the original quarters can no longer accomodate the group, another room will be added if possible, or a new unit will be constructed and the process commences again in a new house.

Through the years this system has developed large, rambling dwelling units consisting of one common eating and cooking room, one or more large sleeping rooms, and a storage and working room. Where the paternal influence in religion is active, a room for dances and other religious activities may be included within the household. Sanitary facilities are a relatively new innovation. Until recently, individual domestic wells were the only sources of water, and outhouses were the only methods of sanitation.

In 1955 the Tribe borrowed $70,000 from the Farmers Home Administration to improve and enlarge the old BIA water system. In 1962 the IHS constructed a sewage system. Nearly all dwellings have water and a majority now are connected to the sewer system.

The Zuni Housing Authority has records showing as many as 39 people occupying one of the extended family dwellings. There are only rare occasions of more than one bathroom in these units, creating a pressing need for the primitive outhouse. At this time, the Zuni population is 4,990 plus 262 members of other tribes, living in 536 houses. A housing study of the 536 extended family households in the Pueblo revealed that only 146 are considered to be up to HUD standards. With repairs, 104 more units could be brought up to standard conditions.

There are 1,114 individual family units, which indicates an average of over two families to each extended family household. In addition, it is projected that the number of family units will increase by 250 between 1969 and 1975.

Following is a recap of these numbers:

Adequate houses	146
Repairable houses	104
Families not eligible (Based on income level)	97
Families who will not accept housing	153
One person family units not requiring housing	114
Number of families that must be provided with subsidized housing under a planned housing program	750
Total family units as of 1975	1,364

In the past home building activity in Zuni has been a multi-family effort through the religious Kivas (fraternities) for the winter Shalako, a religious ceremony to bless new houses. Shalako, plus individual efforts, result in only eight to ten houses being built a year. This is far short of the growing need. The building of houses is further restricted by an inadequate source of available mortgage financing as the Shalako houses do not, for the most part, meet the standard specifications for mortgaging. Lack of steady employment and resulting low family income makes many Zunis ineligible for standard mortgage financing.

Most of the land in the community is owned by individual Zunis, not by the Pueblo. In the past, as a new family unit emerged, the new house was built on a portion of the land owned by the extended family, resulting in crowding and inadequate clear space around the dwelling.

In 1968, the Pueblo purchased 14 acres from an individual Zuni. This was subdivided and lots are being sold to those families who wish to avoid overcrowded conditions or who cannot otherwise obtain land. This has been a welcome innovation and future community planning includes the acquisition of additional land for this purpose.

The present subdivision is, and all future subdivisions will be, included in the community utility and street system. The costs for utility extensions and paving of streets are included in Project Five of this section.

The community land use plan, presently being prepared, will be supplemented with necessary zoning ordinances to assure orderly and compatible growth and development.

The proposed plan of action is to build houses according to the following schedule:

Fiscal Year	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
Number of Houses	165	150	150	100	0	565

In addition to the 565 houses included in this plan, an additional 185 units are planned for construction in FY 1970.

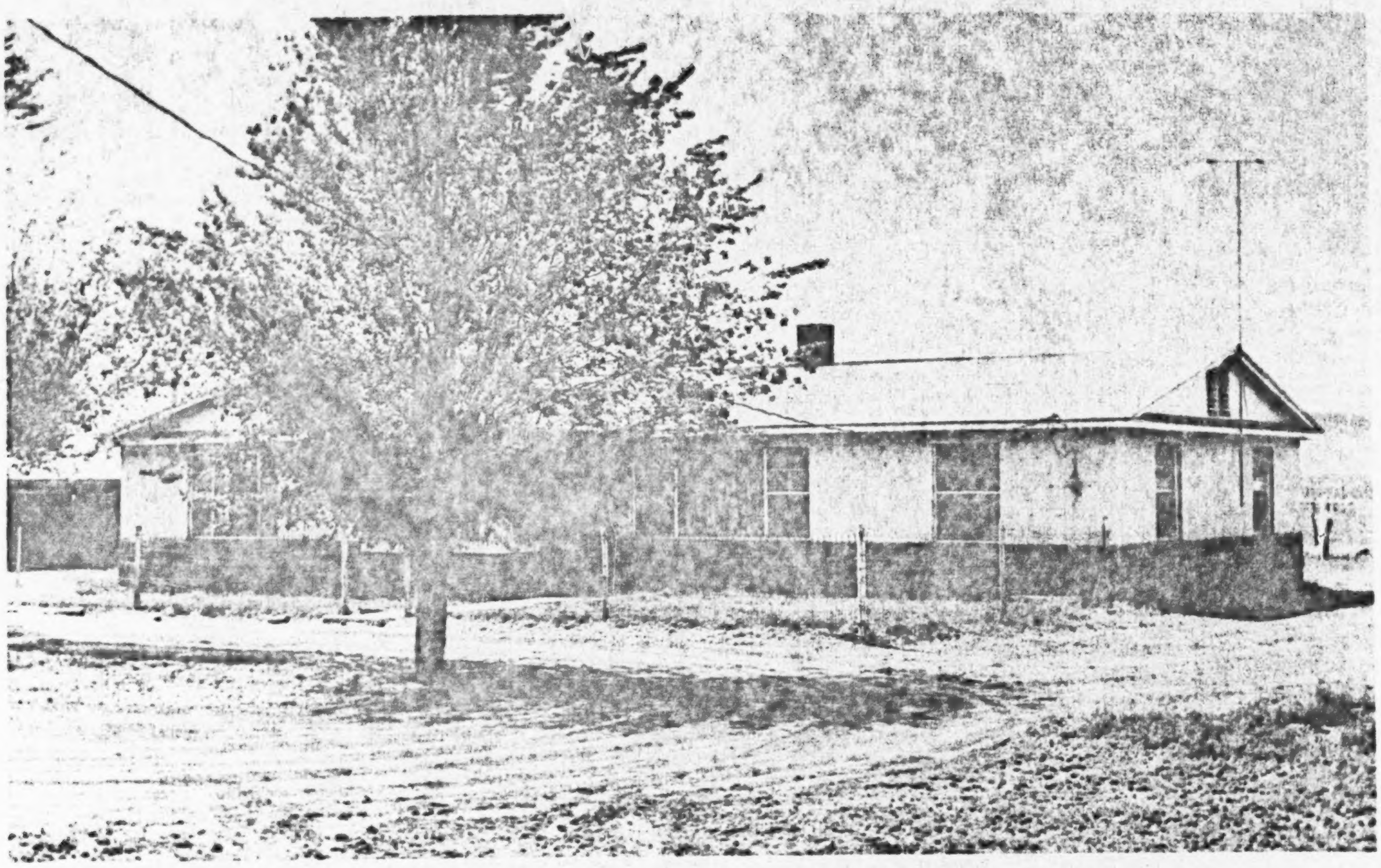
Because of the dire need for housing and the enthusiastic acceptance by the Zuni people for this program, it is deemed most advisable to proceed without delay. It was difficult to generate enthusiasm and it could quite easily die.

The proposed program will complete the solution of the pressing housing needs facing the Zuni people. Thereafter it is estimated that there will be a need for 20 additional houses annually.

Benefits:

One of the major goals of the Zuni people is to Improve Living Conditions. This housing program will be a major contributor toward accomplishment of this goal. Crowded and unsanitary housing conditions lead to a high incidence of mouth and nose, air-borne diseases such as chickenpox, measles, upper respiratory infections, influenza, pneumonia and other common diseases. The threat of an epidemic is always present, as demonstrated by the measles epidemic of 1967 when more than 195 cases were seen in the local hospital, some of whom now have permanent brain damage. Other serious diseases directly resulting from crowded conditions are streptococcal infections, with its consequence of rheumatic fever and glomerulonephritis; meningococcal meningitis; tuberculosis; and the ever present possibility of an outbreak of plague.

Equally important is the mental health aspect of crowding, with its lack of privacy leading to much promiscuity. Family problems created by newlyweds having to live with an in-law are common and are one of the main causes of the break down of family unity among the Zuni people.



3. MEDIUM AND HIGH INCOME HOUSING

Funding by Agency ($000)	1971	1972	1973	1974	1975	Total
HUD	680.0	680.0	680.0	680.0	680.0	3400.0
BIA (Loan)	10.0	10.0	10.0	10.0	10.0	50.0
Total Federal	690.0	690.0	690.0	690.0	690.0	3450.0

Description:

There are approximately 250 Indian families who do not qualify or do not want low income subsidized housing. In addition, there are 148 non-Indian families living in Zuni. Of the 148 non-Indian families, 73 live in substandard houses, and 100 of the 250 Indian families occupy inadequate houses. These people need improved housing. The communities of Zuni and Blackrock are being considered as locations for such housing. With the coming industrial and commercial development of the area, there will be an estimated additional need for 70 dwelling units by FY 1975. The total of 243 units will be for moderate and higher income families.

Since most land in the Zuni community is owned by individuals, there is very little available for long-term leasing that would afford those with higher incomes the opportunity to apply for the regular housing loan guarantee programs of HUD or commercial sources. There also is a definite lack of commercial funds available for development of rental units on the reservation.

Plans are being prepared for the over-all development of 200 rental units. A land leasing program for individual home sites at Blackrock will be started to accommodate this number of units.

A fifty unit Trailer Court is also being planned. Housing of Public School staff will be programmed with the construction of additional school facilities.

The Project contemplates a loan from the BIA Revolving Loan Fund for the Trailer Court since it will be an individual Indian enterprise and will

63/64

generate sufficient income to retire the loan and provide a return to the owner. Construction is spread over the five-year period to allow the owner to expand his facilities in keeping with demand. The funding from HUD is also spread over the planning period for the same reason.

Benefits:

Completion of this project, together with the Low-income Housing Development Project, will take care of the immediate housing needs in the Zuni community within a relatively short period of time. In addition, it will provide for those needing housing whose income is in excess of the standards to qualify for low income housing but insufficient to enter into a standard commercial mortgage agreement.

4. PUEBLO UTILITY DEVELOPMENT

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
Federal: HUD (Loan)	1643.9	0	0	0	0	1643.9
Other: Zuni Pueblo	1.6	1.6	1.6	1.6	1.6	8.0
Total Development Cost	1645.5	1.6	1.6	1.6	1.6	1651.9

Description:

The current utilities situation in the community is deplorable in comparison with an average American community. The following indicators are pertinent:

Positive	% of Homes Equipped*
Some Plumbing	76%
Kitchen sinks and modern toilets	74%
Lavatories and baths/showers	20%
Bottle gas (LP)	30%
Electricity	97%
Telephone	9%

*536 homes

Negative	No. in Village
Outside dry toilets	139
Pig/Hog Pens	100
Sheep/Cattle Corrals	125
Chicken Coops	35
Homes with natural gas	0
Homes with garbage service	0

The 139 outside toilets, extremely close to homes and children's limited play areas because of the Pueblo type building, are an ever present health hazard. The corrals, coops and pens, adjoining the houses for the convenience of caring for the animals and for the pigs to consume all garbage from homes, result in odorous, unsightly, unsanitary conditions. Many infectious and insect borne diseases are directly attributable to these conditions. The reality of contamination of surface and ground water supply is clearly seen in the epidemic of viral hepatitis which occurred in the past seven years, affecting one-fifth of the population. These deplorable conditions cannot be eliminated without the full and effective implementation of a program to provide the necessary utility services. The sewer and water system must be extended and made available to all houses before all outside toilets can be removed.

The pigs cannot be removed from the home sites until a garbage collection service is in operation.

This project proposes to consolidate all existing community utility functions and the provision of additional necessary services into a formally organized complete utility department, managed by a director. The current functions are (a) water and sewer department, (b) agreement with REA for electricity, and (c) agreement with Suburban Telephone Company. New services will include (a) a gas distribution system, to be financed through a HUD loan, (b) trash and garbage collection, and (c) a program to encourage removal of the 139 existing outdoor toilets, 100 hog pens and 125 corrals in the pueblo.

The utility department responsibility will be to provide water, sewage, trash and garbage service, and gas distribution to all homes. The Director will represent the Tribe in all working arrangements with REA and Suburban Telephone Company. The operation of these systems and services will be done through in-house operations, contracts with individuals and companies, or agreements with public and Federal agencies.

The rate of development and provision of services will be dependent upon the rate of progress made on other projects such as housing construction and street paving. Obviously, the progress on these projects depends upon the coordinated funding of the total program.

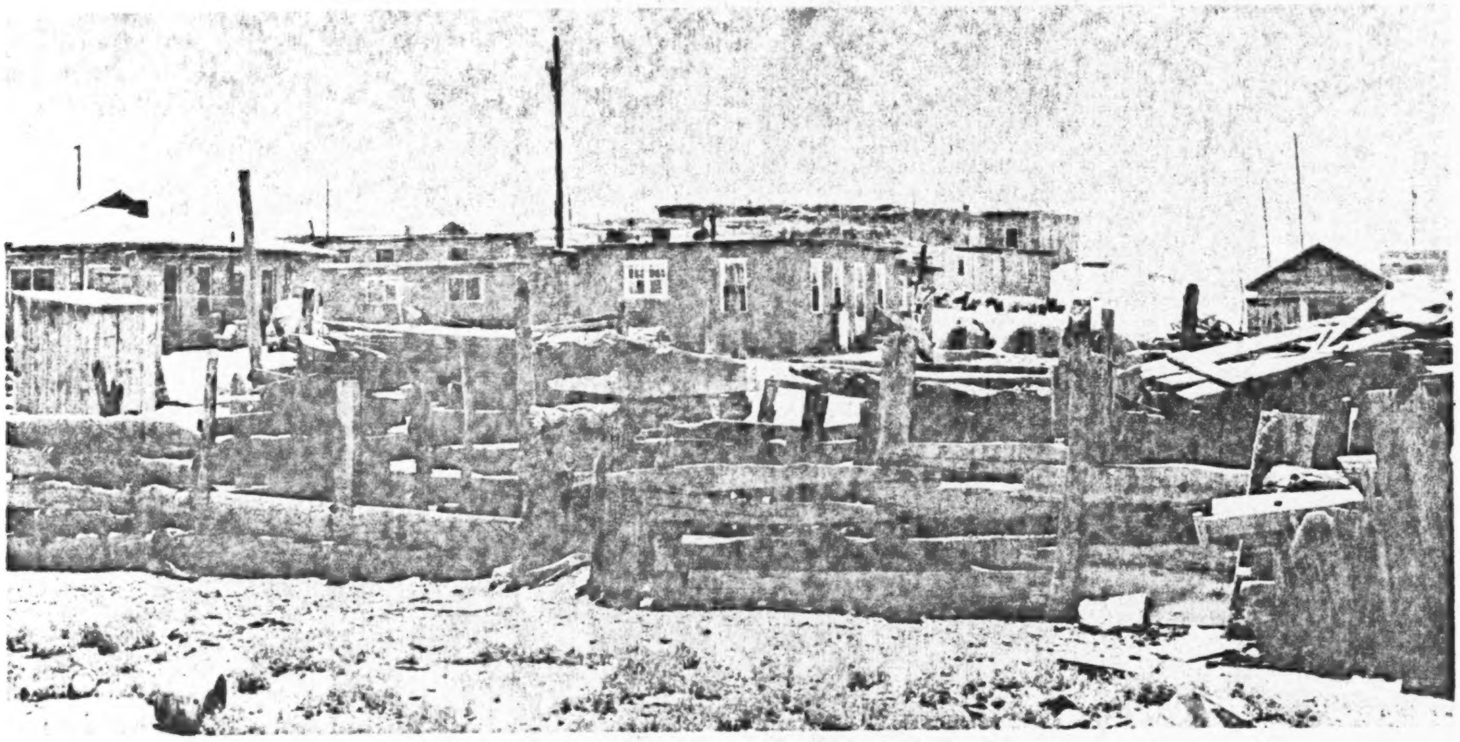
Benefits:

(a) Provision of adequate utilities to the residents of Zuni including piped-in gas, water and sewer connections, and trash and garbage services and support of other projects such as housing construction, street paving, etc.

(b) Removal of undesirable, odorous conditions from the community.

(c) Improved management of existing water and sewer systems, putting the total utility department on a paying basis.

(d) Elimination of numerous health hazards in the community.



5. STREETS AND STORM DRAINAGE

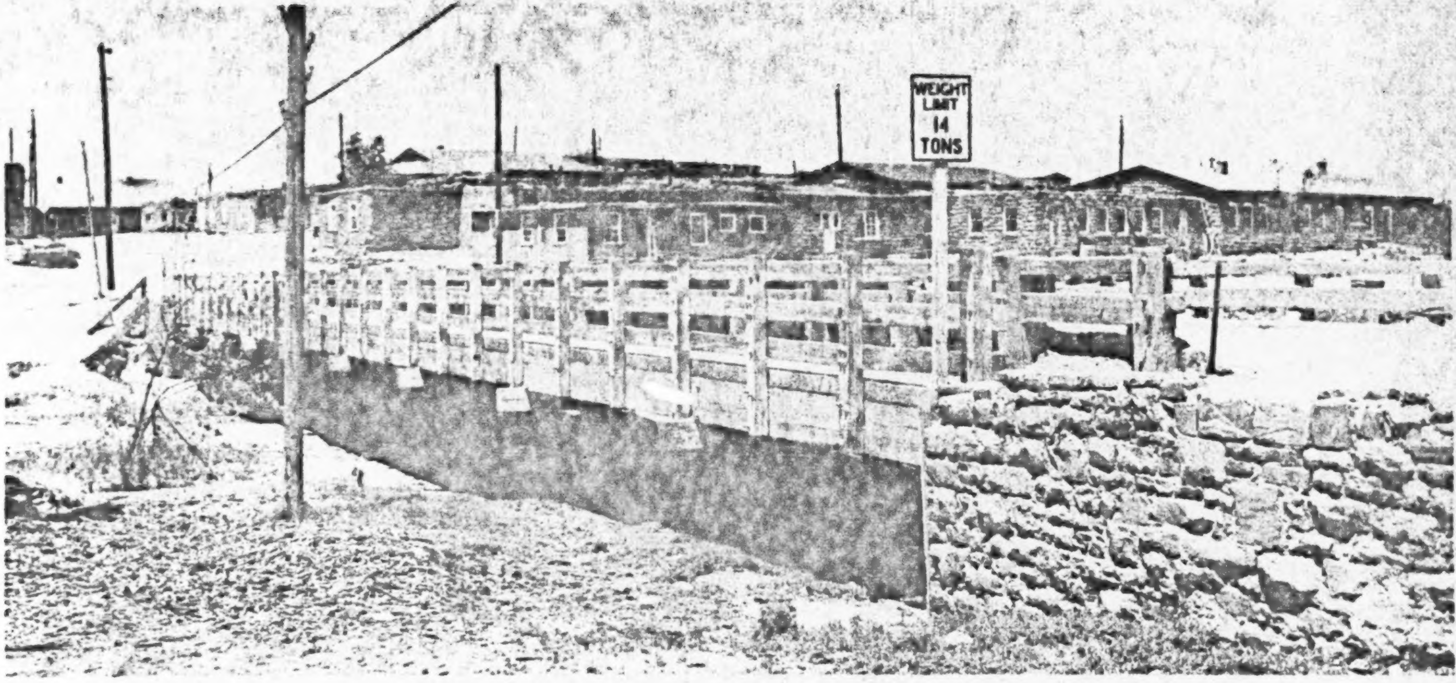
Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
BIA	1700.0	900.0	900.0	900.0	900.0	5300.0

Street construction is a vital supportive project to all major components of the Zuni Comprehensive Development Plan. It must be funded in order to develop the community to minimum U.S. standards.

Description:

The only pavement in the Pueblo is 1.7 miles of State Highway #53 which bisects the village. All other streets are dirt surfaced, in poor repair, and have inadequate drainage. During inclement weather, the roads become virtually impassable because of mud. During dry weather, they are dusty and full of chuck holes. These conditions are deterrents to commercial development, community cleanup, and tourism.

A most important aspect is the unhealthy conditions created by muddy or dusty streets. There is



a high incidence of respiratory diseases among the Zuni people that can be attributed partly to the streets. This project covers 45 miles of streets as shown on the proposed land use plan for Zuni Pueblo. The construction will be of two-inch bituminous paving, concrete curbs, gutters and storm drainage system; all necessary traffic signs; and two bridges across the Zuni River. The existing wooden bridge, being narrow and unsafe for vehicle traffic, will be used for foot traffic only. This street system will include new housing areas which will be opening up during the planning period.

Benefits:

Paved, properly drained streets and sidewalks are important parts of any community. They will protect pedestrians from injury by automobiles; will allow adequate drainage; will provide a more acceptable appearance for the entire community; and less mud will be carried into the houses.

6. FLOOD CONTROL FOR ZUNI COMMUNITY

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
BIA	61.3	86.4	74.3	72.3	68.1	362.4
SCS	50.0	250.0	0	0	0	300.0
Total Federal	111.3	336.4	74.3	72.3	68.1	662.4

BIA funding is for watershed treatment practices. The flood retardation structure funding for major structures will be included under Public Law 566, Watershed Work Plan, prepared by the SCS. The amount shown for FY 1971 is the estimated cost for a study by SCS. and the amount shown for FY 1972 is the maximum amount allowable under PL 566.

Description:

This project area consists of three drainages which are tributaries of the Zuni River. They are Galestino Canyon, Oak Wash, and Bossen Wash. The three watersheds encompass approximately 161,075 acres in McKinley and Valencia Counties, New Mexico.

Frequently, the Zuni community experiences floods from all three drainages, causing major property damage. Many puddles and small ponds are also created where insects breed and reproduce, producing the vectors for the transmission of plague, tularemia, dysentary, possibly hepatitis, and trachoma. Apart from the mosquitos and flies, the ponds are playgrounds for children, and the possibility of contamination of the water ponds establishes a good source for multiple diseases. It is common to see children in the Zuni Hospital with lacerations from cans and glass from playing in these ponds.

Due to soil conditions and lack of vegetative cover on the drainages, wind and water erosion have caused severe damage to the range land from high runoff and heavy sedimentation in lower drainage areas. In 1959 the Oak Wash detention dam was washed out. It has never been replaced or repaired. The result is an annual flood from Oak Wash. The flood does extensive damage to irrigated cropland, canals, ditches, and laterals, and washes out roads.

The heavy runoff from Galestino Canyon has caused excessive erosion and siltation in the Zuni River channel. These conditions have redirected flood waters through the Zuni Community, formed swamp areas harboring insects and creating unhealthy conditions.

The need for flood protection from these three drainages will be documented in a request to the SCS for Federal assistance under the Watershed Protection and Flood Prevention Act for planning the complete treatment of the drainage areas of the Zuni community watershed. This will include reseeding to restore and improve ground cover, as well as installing flood retardation dams, erosion control structures, water detention dams to control flooding and siltation.

Benefits:

The immediate benefit will be a reduction of flooding in the Zuni community and adjoining areas, as well as improved health conditions. This will benefit all residents. In addition, the complete treatment of the watershed will increase the livestock carrying capacity, resulting in increased income to Zuni livestock owners. It will also provide protection to an existing irrigation area in which there is considerable investment.

7. OJO CALIENTE VILLAGE FLOOD CONTROL

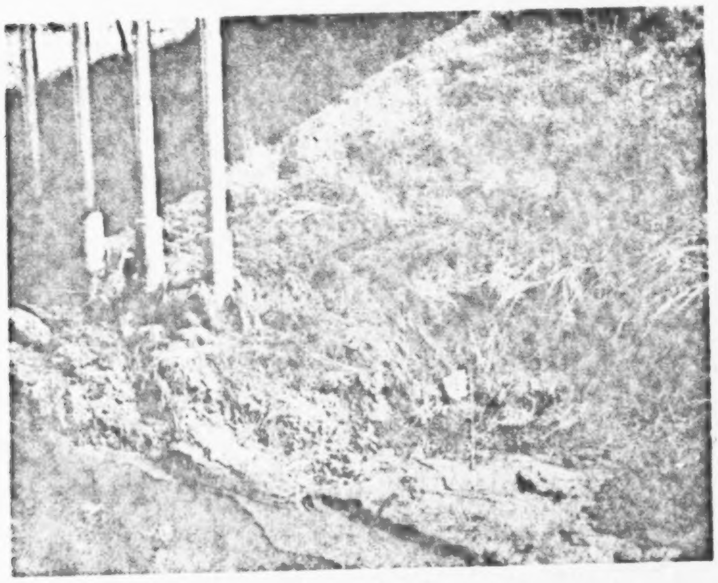
Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
BIA	54.7	65.6	36.1	22.2	22.2	200.8
SCS	25.0	250.0	0	0	0	275.0
Total Federal	79.7	315.6	36.1	22.2	22.2	475.8

BIA funding will be spent for watershed treatment. In FY 1971, the amount estimated is for the updating and re-evaluation of a 1964 study. This study will determine what major flood control structures are now needed and their cost. The funding shown for FY 1972 is the maximum allowable under SCS and will be revised as soon as actual costs are determined.

Description:

The Ojo Caliente watershed is a tributary of the Zuni River, located in the southwest corner of the Zuni Reservation and near the western boundary of New Mexico. It is 15 miles long, averages 5 miles wide, and covers 30,891 acres.

Some areas of the watershed are so badly eroded it does not respond to treatment and have increased the water yields and silt loads. This, in turn, has caused severe damage to the range land, contributed to high runoff and heavy sedimentation in the lower drainage areas. The most severe problem occurs in the Ojo Caliente Wash, which creates a hazard to accessibility to religious areas and to tourism enterprise development areas, damage to farm land, irrigation structures, and water storage and distribution facilities. Most important, however, is the imminent danger of flood to the residents of Ojo Caliente and their property.



This quaint village plays an important part in the Zuni-Cibola Historic Park Project. It is essential to protect the investment which is planned for it.

This project will provide major flood retardation structures. These together with the complete watershed treatment will control runoff water, with resultant siltation, and eliminate the danger of flooding.

The Ojo Caliente bridge was built by the BIA in 1966 at a cost of $34,100. Annual flooding has caused the erosion shown, in the short period of three years. At this rate, it is possible the entire bridge may be lost.

Benefits:

The restoration of Ojo Caliente village is an integral part of the Zuni-cibola Historic Park Project. The danger of loss of investment of NPS funds from flooding will be eliminated. An additional benefit will be that the watershed treatment will increase the livestock carrying capacity of the range which will increase the income to Zuni livestock owners who utilize the watershed. It will also protect BIA investment in the bridge.

8. PARKS AND PUEBLO BEAUTIFICATION

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
Federal: HUD	54.0	54.0	36.0	27.0	18.0	189.0
Other: Zuni Pueblo	6.0	6.0	4.0	3.0	2.0	21.0
Total Development Cost	60.0	60.0	40.0	30.0	20.0	210.0

Description:

The debris in the Zuni river and adjoining areas is very unsightly and presents a health hazard, in relation to lacerations from glass and cans, for children playing in the area. Currently, there is an average of five cases per week known to the Public Health Hospital from lacerations. Animal excreta pollute and contaminate the River and are one of the causes of dysentary in children who play in the water.

This project contemplates development of multipurpose outdoor recreational parks including tennis courts, picnic areas and play grounds. Removal of debris within the community and complete stream beautification of the Zuni River are also included. With the accomplishment of the flood control projects, the flow of water in the Zuni River will be stabilized, allowing full development of the river bed and banks. Pools will be developed for wading by means of small dams. The bed will be gravelled, and the banks landscaped with shrubs, grass, trees, and flowers.

Picnic tables, benches, trash barrels, and public restrooms will be installed, along with a system of walking and bicycle trails.

The parks will serve the needs of all age groups, with the primary purpose of meeting the recreational needs of the community under a planned and supervised recreational program. The high frequency of excessive use of alcohol, venereal disease, truancy, juvenile delinquency, and out-of-wedlock pregnancies, are attributable in part to a lack of recreational outlets.

Benefits:

Sanitary conditions in and along the River will be improved, with a lessening of injuries, dysentery, and other water pollution related diseases. With adequate facilities, the planned recreational program will provide outlets for wholesome activities. These facilities will also contribute to the over-all promotion of recreation and tourism in the community.

9. NEW MEXICO HIGHWAY #53 BYPASS

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
Federal: Dept. of Trans.	375.0	0	0	0	0	375.0
Other: State of New Mexico	378.0	16.0	16.0	16.0	16.0	442.0
Total Development Cost	753.0	16.0	16.0	16.0	16.0	817.0

Description:

The paving on Highway #53 between Zuni and Grants, New Mexico was completed in 1966. This route is now the shortest between Albuquerque, New Mexico and Phoenix, Arizona, which has increased passenger car and truck traffic considerably.

The main concern at this time is the danger to pedestrians and local traffic caused by the heavy use of Highway #53 which runs through Zuni. The heavy traffic is also causing the paving to deteriorate rapidly, creating the need for expensive and frequent repairs by the New Mexico State Highway Department.

There is no Port of Entry at Zuni and in the area of Belleview, New Mexico on the eastern state boundary. Therefore, it is possible for heavy trucks to cross through the central portion of New Mexico without having to pay road taxes.

The Zuni Pueblo proposes the State of New Mexico, the Federal Highway Administration of the Department of Transportation, and the Bureau of Public Roads construct a bypass around the north side of the community and establish a Port of Entry.

Benefits:

It is anticipated that, in addition to improving safety and reducing maintenance costs, this project will enhance safety in the Zuni community. The Port of Entry will provide a minimum of four jobs to local citizens. It will also provide a more convenient location for the sale of automobile and driver's licenses. Additional income will accrue to the State of New Mexico from highway taxes due from large trucks which now can pass through the State completely missing a Port of Entry.

10. JAIL AND COURT FACILITIES

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
BIA	311.0	0	0	0	0	311.0

Description:

This project is a vital support to the improved police department described and funded in the Pueblo Government Management project. The police department will be enlarged, better trained and equipped, to assure more adequate community law and order.

The existing facility was renovated in 1962 by using an old rock structure, attaching it to the present Pueblo Council building and adding a stucco finish. Office space is limited. The Judge, court clerk, probation and parole officer, and juvenile officer jointly utilize one small office. The court room is also utilized by the Pueblo Council and community organizations for meetings.

There is only one small juvenile cell, unventilated, and designed to house four inmates. This facility does not provide for a female juvenile cell. Often parents request their intoxicated children be placed in a cell until sober, creating problems in separating juveniles from adults and females from males. One shower located at the end of a hall, protected only by a curtain, is provided for all prisoners. Briefly the existing facility is unsanitary, overcrowded and totally inadequate.

This project will provide a facility of 8,000 sq. ft. for housing prisoners, jailer's quarters, court room, judge's chambers, and offices for the court clerk, police chief, probation and parole officer, juvenile officer, and retention room for minors. The facility will be designed and equipped to meet security and safety standards of the Federal Bureau of Prisons.

Benefits:

The facility will provide a safe, sanitary place for the care of prisoners, together with the supportive rehabilitative services needed to carry out the most modern correctional program.

11. ZUNI HEALTH SERVICES

Funding: ($ 000)

Because of the urgency of Zuni health conditions and the condition of existing facilities, alternate funding programs are presented, as follows, for earliest possible action:

Hospital and Outpatient Clinic	**1971**	**1972**	**1973**	**1974**	**1975**	**Total**
Construction	2817.0	.0	.0	.0	.0	2817.0
Supportive (staff and utilities)	74.7	74.7	74.7	74.7	74.7	373.5
	2891.6	74.7	74.7	74.7	74.7	3190.5
Outpatient Clinic and Hospital						
Construction	250.0	.0	2817.0*	.0	.0	3067.0
Supportive (staff and utilities)	58.4	58.4	74.7	74.7	74.7	340.9
Total	308.4	58.4	2891.7	74.7	74.7	3407.9

*Includes increased cost of construction in 1973 and some duplication of equipment for clinic and hospital use.

The **first funding level** is to build an outpatient clinic facility of adequate size as a part of a new hospital in FY 1971. Supportive costs, totalling $74,700 are expected to be needed for utilities and additional staff consisting of 1 physician, 2 Registered Nurses, 2 Licensed Practical Nurses, 1 Health Educator, 1 Social Worker, 1 Medical Records Clerk and 1 Janitor-Chauffeur.

The **second funding level** calls for the construction of the outpatient clinic in 1971 and the postponement of construction of the hospital until 1973. Supportive costs for the second level consist of all of the above staff with the exception of 1 Registered Nurse and 1 Licensed Practical Nurse. These two positions would be added in 1973.

Description:

The Indian Health Service maintains a general medical, pediatric and obstetric hospital facility and provides outpatient care, one-half day, 5 days a week with 24-hour emergency service. The daily inpatient (ADPL) load has averaged 19-21, however, busier periods create overcrowded conditions. The inpatient load figure (see table below) generally follow the total Indian Health experience of decreasing inpatient loads with increasing outpatient activity. Discharges and hospital days are consistent with the ADPL trends. Currently, an average of 55-60 outpatients are treated daily with a high of 100 patients a day being experienced occasionally. The table below illustrates the sizeable increase in utilization of outpatient care over the last five years.

ZUNI HOSPITAL

Average Daily Patient Load and Outpatient Visits

Fiscal Years 1964-1968

Fiscal Year	**Average Daily Patient Load**		**Outpatient Visits**
	Year	**3-year Avg.**	
1964	21	22	8,653
1965	23	20	11,213
1966	17	21	11,744
1967	22	19	12,763
1968	17	–	12,994

The basic health problems of the area are infections and chronic degenerative diseases. Continued care for patients exposed to poor housing conditions and inadequate sanitation, and the lack of knowledge regarding the spread of infectious diseases are the major problems. Major health problems are presented in the Governor's opening statement as health problem indicators.

The following is a comparison of services available to the Zuni Pueblo:

	Zuni	**Comparable U. S. Group**
Physicians in Patient Care	3	6.6
Dentists in Practice	1	2.3

74/75

While the Indian Health Service facilities and services are the only ones in the area, they are available **only to Indians**, except on an emergency basis resulting in essentially no medical services for the 700-1,000 non-Indians that are a part of the Zuni economic and social community. Limited medical services are available to non-Indians in Gallup (40 miles) and Grants (70 miles). Adequate facilities for non-Indians are 155 miles away in Albuquerque. The availability of health care services for non-Indians is critical for their attraction and retention in appropriate numbers of personnel for the launching of the development projects in the total plan.

Yet the number of non-Indians in the entire area can not be expected (possible increase of 300) to attract separate medical capabilities. Thus health care should be made available to non-Indians in Indian Health Service facilities. This position is consistent with the legislation which has been proposed which would permit health services to non-Indians in remote or isolated locations following consent of the tribe(s) concerned with the provisos of priority of care for Indians and a mechanism for reimbursement for services to non-Indians.

The facility available for delivering these services is a hospital building which is non-fireproof, consisting of interior wood floor, roof and wall partitions. The outpatient area is greatly overcrowded and offers little privacy for patient examinations and treatment. There is no emergency room as such.

The proposal is for the provision of staff, support, and facilities for direct patient services by physicians for the treatment of acute medical illnesses and chronic diseases, and for maternal and child health care and emergency care. Field health preventive and follow-up services as well as epidemiology, health education, and community health services will be provided.

Benefits:

Provision of adequate staff and physical facilities to meet patient care and accreditation standards will accomplish:

1. Elimination of current outpatient clinic overcrowding, which discourages visits because of prolonged waiting periods and lack of privacy, which tends to lower quality of care provided.
2. Provision of sufficient waiting area, reducing or preventing spread of infectious disease.
3. Provision of an emergency room with adequate facilities for acute care of trauma cases and medical emergencies.
4. Provision of inpatient supportive and ancillary facilities and patient bed spaces according to current and anticipated practices.
5. Improved coordination of field and hospital medical follow-up and consultation.
6. Provision of educational facilities for health education activities, diabetes clinics, meetings of Pueblo Health Board, Pueblo participation in planning, etc.

Provision of appropriate resources will result in these benefits:

1. Greater educational communications about health within the Service Unit and Pueblo organization.
2. Better linkages between the providers of services and those served leading to greater acceptance of comprehensive care by the Indians including more preventive and field health services and earlier treatment.
3. Improved awareness of the importance of the relationships among hygiene, the environment and health.
4. Facilitation of education and staff development particularly in preventive medicine.
5. Higher quality, more extensive and larger volume of services for each Indian and the Pueblo community.

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12. DAY CARE CENTER FOR CHILDREN

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	45.0	0	45.0	0	45.0	135.0
OEO	29.0	29.0	33.1	33.1	37.3	161.5
BIA Loan	15.0	0	15.0	0	15.0	45.0
Total Federal	89.0	29.0	93.1	33.1	97.3	341.5

Description:

Presently, there are approximately 113 working mothers in the community, with 363 pre-school children who need care. With planned industrial expansion, the number of working mothers is expected to increase by 300 per cent by 1975. Preschool age children currently are cared for by grandmothers, other relatives and hired babysitters. Developing inter-personal relationships with peers and adults and an exposure to educational type activities would be accomplished with a day care center. For the most part, pre-school children must now play in streets and other hazardous areas.

A Day Care Center will initially provide care during the day for 20 pre-school age children of working mothers. Sleeping, feeding and training-recreation facilities will be provided, including fenced playgrounds with necessary equipment. It will then be expanded and enlarged to take care of more children as the demand for services increases. There will be opportunity for parents to see the benefits from such care, resulting in utilization of the facility by most working mothers with pre-school children. An added benefit will be a training program for junior and senior home economics students in child care under supervision of the Indian Health Service.

In addition, the Zuni Pueblo will provide continuing maintenance and upkeep on the building. OEO will provide staffing, materials, supplies and operating overhead.

Benefits:

A planned, supervised program of recreation in a protected environment will minimize the possibility of accidents from play in congested areas such as streets, vacant lots and the river.

Nutritionally sound meals and snacks will be provided, thereby improving health. The planned programs of group play, together with adequate educational materials, will better prepare the children for later school experiences. Regular medical care will be provided, minimizing any prolonged unrecognized need for medical care.

13. FACILITY FOR SENIOR AND DISABLED RESIDENTS

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
HEW	72.0	0	0	0	75.0	147.0
OEO	27.3	27.3	27.3	27.3	27.3	136.5
BIA Loan	24.0	0	0	0	25.0	49.0
Total Federal	123.3	27.3	27.3	27.3	127.3	332.5

The Zuni Pueblo will provide annual maintenance and upkeep on the grounds and buildings through ongoing programs of the Tribal government.

Description:

In March, 1969, there were 379 Zunis who were retired or disabled. There currently are no facilities in the community to provide care for these people. For persons needing boarding and nursing services, the nearest facilities are in Gallup, a distance of 40 miles; Grants, 70 miles; and Albuquerque, 150 miles. At present only one known elderly person from Zuni is in such a facility, indicating the general hesitancy of residents to utilize care facilities away from their home community. A major problem in utilization of facilities in other cities is that they do not have Zuni-speaking staff who can communicate with the recipients. Family and friends often cannot travel such distances to visit, causing despondency and loss of hope on the part of the elderly individual and limited response to medical care.

The general attitude among Zunis, as with all proud people, is that to require care for an elderly person outside the family reflects upon the family in terms of inadequacy and lack of fulfillment of their responsibilities. These constraints will be overcome by demonstrating that a better quality care can be rendered with modern facilities where family and friends can freely visit.

Initially a pilot facility will become operative to care for six in-residence persons. Planned expansion will follow an orderly path consistent with need.

Benefits:

Benefits include a better quality care than is generally possible to provide at home, more adequate diet, regular medical and nursing services, planned recreation programs, counseling and referral services. Family members now providing the care will then be able to pursue outside employment or take care of other responsibilities resulting in a generally improved quality of life for both the recipient and the family. An additional benefit will be in a training program under the direction

of the Indian Health Service for Junior-Senior High School girls to receive pre-nurse training and employment. When needed or desired, couples can live together in the facility.

14. COMMUNITY RECREATION

Funding by Agency ($ 000)	1971	1972	1973	1974	1975	Total
Zuni Pueblo	15.0	12.0	12.0	12.0	12.0	63.0

Description:

The only organized recreational activities are those which are sponsored by the High School and the Catholic Church. There is no place where the people can gather after school, in the evenings or on weekends, to engage in wholesome recreation.

An additional problem has become evident: many of the younger Zunis are not physically fit. Recently, the 7th grade girls took the President's physical fitness test with the following results:

50-yard dash	15th percentile
Sit ups	45th percentile
Standing broad jump	20th percentile
Shuttle run	15th percentile
600-yard run and walk	65th percentile

It is planned to form a Community Recreation Committee, composed of representatives from the Zuni Pueblo, Public School, Churches and Federal agencies on the reservation. The committee will manage the program, develop community participation, and assist in acquiring the necessary facilities and equipment.

A full time recreation director will be hired. Ideally, this will be a Zuni dedicated to improve the present social conditions in the community and able to interpret recreational needs and actions required.

Activities which will be available to all ages, will include organized sports, roller and ice skating, adult education, arts and crafts, movies, 4-H and teen clubs, scouting and folk dancing. As the program will be developed by the people through the committee, they will gain wide acceptance.

Benefits:

Environmental health and social problems will be alleviated, and physical fitness of the people increased.

Implementation of this program would include, but is not limited to, the following activities:

- Pony League
- Little League
- Babe Ruth League
- Softball
- Volleyball
- Basketball
- Roller Skating
- Ice Skating
- Swimming
- Arts and Crafts
- Movies
- 4-H
- Scouting
- Teen Club
- Folk Dancing

The activities will be available for boys and girls, men and women. It will gain wide acceptance because it will be developed by the people through the Recreation committee.